
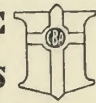


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THESIS

Accounting System for a Wholesale Grocery

by

Richard John O'Connor
(B.S. Holy Cross 1944)

submitted in partial fulfillment of
the requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION

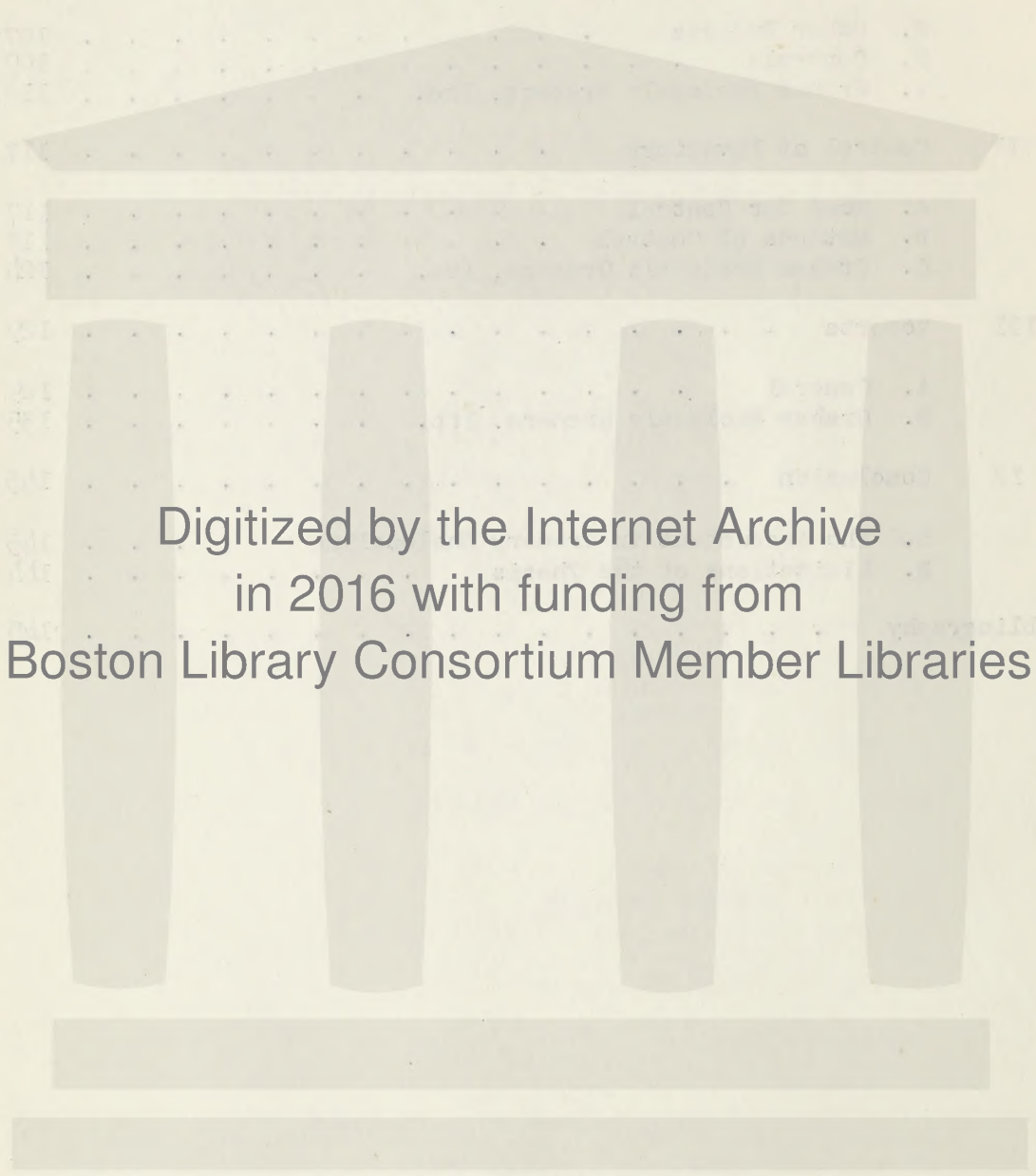


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Foreword

The changes that have taken place in wholesaling in general and in grocery wholesaling in particular during the last two decades have resulted in a great revision in the policies of the wholesale grocer. The growth of the chain store system, the attempt of manufacturers to sell directly to retailers, and the decrease in gross profit margin have caused the wholesaler to work for closer relations with his customers, adopt controlled brands of goods, and keep stricter control over costs (1).

Whether or not the wholesale grocer changes his policies to meet these alterations in his business world, the effects will be shown in his books of account. Where new policies are adopted, their effectiveness will be measured in terms of profit or loss to the concern. Such policies and their measurement presuppose a knowledge of new trends in the field of grocery wholesaling, a knowledge of accounting principles as they are applied to the wholesale grocer, and a sound accounting system as the medium through which these principles are applied and through which data are gathered for measuring the progress of the business.

There are numerous textbooks on the subject of accounting principles in general which give the basic rules of accounting that should be followed in all such systems. There are but a few texts treating the subject of wholesale accounting which present the problems

(1) U.S. Department of Commerce, Bureau of Foreign & Domestic Commerce. Effective Grocery Wholesaling. U.S. Government Printing Office. Washington. 1941.

Foreword

faced by wholesalers in general and the methods of treating them (1). The material presented to the reader in these volumes usually leaves him with a great many ideas concerning accounting for all types and sizes of concerns, but without any idea of which ones he should use in his own establishment or how to apply them. Also, these principles cannot be applied universally in all cases, but must be adapted to the needs of each particular concern. Where a new concern is about to be established, it is a much easier task to set up a proper accounting system than where the business is a going concern and alterations must be made in the present system, since in the latter case revisions must be made in records, in routine, and, occasionally, in personnel.

It is the purpose of this thesis to present and discuss the more advanced accounting principles relating to grocery wholesaling, and finally to arrive at a particular accounting system for a small wholesale grocery concern for purposes of illustration. The material is presented on the assumption that the reader has a knowledge of the basic principles of double entry bookkeeping.

The firm used in the illustration will be known as the Graham Wholesale Grocery, Inc. It is the author's intention to present:

- (1) Heckert, J.B. and Stone, I.J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935.
Jordan, N.E. "Accounting for Wholesalers." Lasser, J.K. Handbook of Accounting Methods. D. Van Nostrand Co., Inc. New York. 1943.
U.S. Department of Commerce, Bureau of Foreign & Domestic Commerce. Effective Grocery Wholesaling. U. S. Government Printing Office. Washington. 1941.

Foreword

1. The functions performed by such a concern in general, and the accounting problems resulting from such functions.
2. The method of treatment of each problem, and the accounts and records that should be kept concerning them.

At the end of each chapter the method to be used, together with reasons for using it, will be presented.

The reader is cautioned that this thesis does not attempt to be all-inclusive regarding the accounting principles applicable to all wholesale grocers. It treats only of these principles which should be applied to the majority of such concerns, and even then it is limited in its detail. For a more complete treatment of such principles, the reader is referred to the various texts listed in the bibliography.

I. The Wholesale Grocer

A. Functions

In periods before the growth of chain store systems and rapid transportation, the wholesaler was a more or less independent middle-man who simply purchased foodstuffs in quantity and sold them on order to retailers. Generally the only functions that he performed were warehousing and delivery. However, the simple methods have been replaced by numerous and complex services for the purpose of strengthening wholesaler-retailer relationships.

With the advent of chain stores, manufacturers and retailers began to by-pass the wholesaler. Purchases by retailers were made directly and in quantity resulting in a lesser cost to the retailer, and thus to the ultimate consumer. In order to meet this competition, the wholesaler was forced to sell on a smaller gross margin. Emphasis was then brought to bear upon the rate of stock turnover and the excessive amount of costs in order to obtain a profit from the new narrow gross margin (1).

In addition to a reduction in prices, the wholesaler began to increase the number and types of services rendered to his customers

(1) U.S. Department of Commerce, Bureau of Foreign & Domestic Commerce. Effective Grocery Wholesaling. U.S. Government Printing Office. Washington. 1941.

Page 7: "They (progressive wholesalers) have rather generally abandoned the old merchandising practice which was based on the principles of high gross margin per unit and low turnover. Instead, it has been an unmistakable tendency for them to try to compensate for lower gross margin rates by striving for higher rates of turnover."

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in order to strengthen his ties with them and assure himself of sufficient outlets for his merchandise.

These services now include retail price suggestion and financial assistance in many cases (1). Although the functions of the wholesaler are designed to strengthen wholesaler-retailer relations, they directly and indirectly perform a service for the manufacturer. These services may be stated as follows (2):

1. Services Rendered Retailers

- a. Assembles for retailers
- b. Purchases in large quantities for retailers
- c. Furnishes prompt delivery service
- d. Aids in increasing retailers' stock turnover
- e. Grants credit
- f. Renders advice
- g. Helps retailers in distress
- h. Extends financial credit and loans

2. Services to Manufacturers

- a. Specializes in distribution
- b. Establishes connections with retailers

(1) U.S. Department of Commerce, Bureau of Foreign & Domestic Commerce. Effective Grocery Wholesaling. U.S. Government Printing Office. Washington. 1941. Page 16.
Beckman, T.N. Wholesaling. The Ronald Press Co. New York. 1926. First Edition. Page 11.

(2) Ibid.
Heckert, J.B. and Stone, I.J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Pp. 9-11.

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- c. Cultivates the field intensively
- d. Effects savings in transportation
- e. Stores for the manufacturer
- f. Renders financial assistance
- g. Stabilizes production
- h. Simplifies the manufacturers' accounting problems
- i. Reduces the manufacturers' cost of credit granting

Not all wholesalers undertake these functions in their entirety.

The "old-line" wholesalers only perform the services that go with warehousing, delivery, and whatever additional basic services they have been forced to undertake. The more progressive wholesalers are ever seeking new ways of strengthening their market by rendering a full line of services to retailers.

There are certain characteristics of a wholesale concern in addition to the afore-mentioned services which should be mentioned here (1):

- "1. Wholesalers are typically trading concerns which buy and sell but do not manufacture goods.
2. Selling is done primarily by salesmen who call on the customers or sell from the floor of the house.
3. Sales are largely on credit.
4. Service must be prompt.

(1) Heckert, J.B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 12.

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5. The trading margin is small.
6. The Wholesaler's business is of medium size
(Majority have capitals ranging from \$100,000 to \$500,000).
7. Wholesalers usually serve limited territories."

The fifth characteristic is one of the most important. It is to be remembered that all the obligations imposed upon the concern, both by the nature of the services it voluntarily renders, and by the nature of its characteristics, must be fulfilled and yet keep operating and other costs low enough to produce a net profit. This raises the problem of adequate accounting and efficient organization.

B. Accounting Problems

The foregoing functions and characteristics of a wholesale grocer result in the following accounting problems according to J. Brooks Heckert (1):

1. Control of selling costs
2. Control of inventory
3. Control of accounts receivable

Another author on the subject, Nathan E. Jordan, suggests a fourth problem, that of "Control of finances" (2). However, proper

(1) Ibid

(2) Jordan, N.E. "Accounting for Wholesalers." Lasser, J.K. Handbook of Accounting Methods. D. Van Nostrand Co., Inc. New York. 1943.

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control of each of the above items will automatically render financial control. Thus, control of selling costs will enable management to forecast the need for funds to meet this cost; control of inventory will enable management to reduce its investment in inventories to a minimum; control of accounts receivable will enable management to reduce its cost of carrying these accounts and to budget cash receipts and disbursements. By use of standard costs and budgets in relation to these three, management will have adequate financial control.

The accounting system of the concern must be so designed as to gather adequate data for such control, and also to furnish the usual elements of protection, guidance and coordination common to all accounting systems. This presupposes adequate standards, budgets, records, statistics and reports (1).

This system is only one of the facilities upon which management must depend. To be sure, it is one of the most important facilities of the concern, and as such must be adequate and well designed. This the accountant must keep in mind at all times when studying the problem of a new system. However, another very important item, one upon which the accounting system itself is based, is an efficient working organization. In order to attain proper control, the accounting system must be based on a logical division of responsibility. Where the organization has already

(1) Heckert, J.B. and Stone, I.J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 12.

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been established, it will be more difficult to install an adequate accounting system, but the system will bring to light the errors in organization enabling management to change them (1).

Consequently, in beginning his task of designing a new system for the wholesale grocer, the accountant should make a thorough study of the desired organization. Consideration must be given to the present organization, if it is a going concern, and changes noted where necessary. If the changes would be too great or too costly, for example alterations to the buildings to alter the shipping and receiving procedure, the accounting system itself may have to be adapted in part to existing conditions.

All phases of operations should be noted by the accountant in his preliminary studies. The name of each employee and his individual duties should be written down so that the accountant may have a thorough knowledge of how the concern operates. All of this information is essential in designing adequate accounting records to enable proper controls.

Once he has a thorough knowledge of the design of the organization and what it is supposed to accomplish, he can establish the outline for the new organization upon which his accounting system will be built.

(1) Donald, W.J. Editor-in-Chief. Handbook of Business Administration. McGraw-Hill Book Co., Inc. New York. 1931. Section IV. Chapter VIII. Page 991: "Even though an organization is rarely built to suit an accounting system, the work of constructing such a system serves effectively as a check on the effectiveness of the organization line-up and usually opens the executive's eyes to opportunities for changes which will be of advantage."

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Although this phase of the work is essentially a task for a man especially trained in management, it is wise for the accountant to be familiar with that field himself. If he is not, he should consult someone who will work with him in revamping the organization. When his work in this phase has been completed, he should receive approval of it from the executives; otherwise he may design a whole accounting system on it and then have to change it.

This preliminary study of the organization and its operation will give the system man an opportunity to notice the problems peculiar to the particular concern, and to become acquainted with the personnel. The net result should be a more complete accounting system and the staff's complete confidence in the accountant (1).

C. Graham Wholesale Grocers, Inc.

1. Present Organization

Graham Wholesale Grocers, Inc. is a small, "old-line" wholesale establishment selling only bulk foodstuffs. Its ownership is a close corporation, all shares of stock being held by members of the same

(1) Heckert, J.B. Accounting Systems - Design & Installation. The Ronald Press. New York. 1936.

Page 31: "While existing methods should not form the basis of the revised system, they will suggest many problems to be met and particularly many detailed considerations not revealed elsewhere in the preliminary study."

Page 32: "By the end of the preliminary survey, the system man should have gained the confidence and enlisted the full cooperation of the staff."

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family. The management is trained in the essentials of grocery wholesaling, but modern methods and innovations are not known or, if known, are not practiced.

It is a small establishment, having an annual sales volume of approximately \$500,000. Located in a city of 200,000 its operations are carried on from one centrally located warehouse. Orders are obtained "over the counter" at the warehouse, or through traveling salesmen, mail and telephone.

The number of employees, including officers of the corporation, is twenty, as follows:

Executives 4

Office Personnel 4

Salesmen 6

Warehousemen and Drivers . 6

Their names and duties are as follows:

John Graham - President

1. General Supervision - No specific duties
2. He is more or less a figurehead.

Francis Graham - Vice-President

1. Buyer and General Manager
2. He is responsible for all activities of the organization, makes all purchases, and has complete charge of the six salesmen.
3. All changes in policies, equipment, etc. must first be approved by him.

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4. He gives final credit approval.
5. He may sign checks in the absence of the treasurer

Robert Graham - Clerk

1. He works in the warehouse most of the time, assisting the other men.
2. He contributes toward the control of the organization in only an advisory capacity.
3. In the absence of the vice-president he passes approval on minor issues.

Mary Graham - Treasurer

1. She has complete charge of the office.
2. As treasurer she handles all cash receipts and writes all checks. She also has the responsibility of recording the cash received in the cash receipts journal.
3. She takes care of counter sales.

Jane Smith

1. She is a bookkeeper and clerk. As such she is responsible for recording the daily sales, purchases, and cash disbursements.
2. She posts the accounts receivable and accounts payable detail daily.
3. She does stenographic work when necessary.
4. She makes out statements of customers' accounts at the end of each week.

Virginia Robinson

1. She is responsible for pricing and extending all sales invoices after the order is filled and prior to its leaving the warehouse.
2. She must note all changes in cost prices on the various items received when she okays purchase invoices. She must then record the changes on the concern's cost and price records which are kept in a Remington-Rand Kardex File.

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3. She assists the accounts receivable clerk in making up weekly statements to customers.

Helen Jones

1. She is responsible for keeping salesmen's catalogues as up to date as possible.
2. Prior to her assignment to catalogues, she was in charge of perpetual inventory.
3. The salesmen's catalogues require only one-half day's work each day. She does whatever additional work is assigned to her in her free time. If there is no work, she goes home.

Salesmen:

1. John Holden
Covers the North and West sections of the City.
2. Harold White
Covers the East and South sections of the City.
3. Ronald Carmody)
4. George Foley) Each covers one fourth of the
County outside the City limits.
5. Horace Tynon)
6. Frederick Johnson)

Wyman Swenson

1. He is the head warehouseman and is responsible for the proper functioning of the warehouse and truck crews.
2. All orders must pass through him.
3. He initials all purchase invoices received after checking the goods covered by them.
4. He also initials all sales invoices after the orders have been checked out and loaded on the trucks.

Warehousemen:

1. Albert Simons - Assists the head warehouseman in receiving, storing and shipping merchandise.

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2. Harlow Marble - Assists the head warehouseman in receiving, storing and shipping merchandise.

Drivers:

1. Robert Macy)
2. Joseph Simpson) Each drives one of the three Company-owned trucks. They serve no particular territory, delivering wherever they are sent by the chief warehouseman.
3. Matthew Rogers)

The accounting system is simple in form consisting of:

1. A general ledger
2. An accounts receivable detail ledger
3. An accounts payable detail ledger
4. A general journal
5. A purchases journal
6. A sales journal
7. A cash receipts journal
8. A cash disbursements journal

The information for the vast majority of entries in these books of account is obtained from purchase invoices, sales invoices, and summaries of cash receipts turned in by the salesmen.

The purchases are entered individually each day, the detail being posted directly from the individual invoices. All sales are recorded in total in the same manner, other than cash sales which are not posted to the detailed ledger, but which are entered in the cash receipts journal as a daily total.

The bookkeeper and treasurer make all routine entries. The books are audited and closed annually by a public accountant who is

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available at all times to make entries of an unusual nature with which the office employees do not know how to cope.

The office procedure for handling invoices and cash is as follows:

Purchases

1. Purchase invoices are received from the warehouse after they have been checked and initialed by the chief warehouseman.
2. They are then checked by Virginia Robinson for price changes if any. These changes are then made on the price records of the concern, the sales price being changed accordingly.
3. Next they are given to Jane Smith who numbers the purchase invoices received for the day and enters them in the purchase journal.
4. The invoices are then posted directly to the individual accounts in the accounts payable detail ledger.
5. Once entered, they are filed in "Bills Payable" file which is checked daily by the treasurer. As discount and credit periods expire, the bills are paid.
6. Once paid, the purchase invoices are filed according to vendor.

Sales

1. Sales orders written by the salesmen are used for the sales invoices. There is no transcribing of orders.

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2. The orders are turned in to the office by the salesmen, sent to the warehouse for filling, and returned to the office for pricing and extending. This procedure eliminates the pricing and extending of items which are found to be out of stock as the order is being filled.
3. While the order is being filled and delivered, a copy of it is kept in the office as a check on return of the delivery receipt by the driver.
4. Sales are entered in the sales journal as a total each day, cash sales being entered as a total in the cash receipts journal.
5. The sales invoices serve as the basis for entries in the accounts receivable ledger.
6. Copies of the invoices are filed by customer and by salesman. No attempt is made to keep a record of invoices by number at any time.

Cash Receipts

1. Collections are made by the salesmen who record the customer's name and the amounts on a copy of the sales order. These receipts, together with the list of customers and their amounts are turned in to the treasurer daily. She then verifies them.
2. Cash received through the mail or over the counter is received by the treasurer who records the receipts on

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a sales invoice.

3. These sales invoices used for preliminary records of cash receipts serve as the basis for recording the cash receipts by individual customers and for posting to the accounts receivable detail.
4. After all entries have been made, these invoices are filed according to salesman.
5. All cash receipts are deposited daily.

Cash Disbursements

1. Checks are written directly from purchase invoices and expense bills.
2. Distribution to the various expense accounts is made at the time of payment.
3. An accounts payable detail ledger for merchandise purchases only is kept. Posting to this book is done from the "paid" invoices.

No record of merchandise inventory is kept other than the buyer's occasional count. Until recently an attempt was made to keep a perpetual inventory in two large loose-leaf binders; but the system was so inefficient and fatiguing to the inventory clerk, that it was abandoned as useless.

When necessary, additional financing is done by loans from a local bank. These loans enable the concern to buy in large quantities, to procure larger discounts, lower freight and express charges, and they

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necessitate fewer purchase orders.

Wage compensations are based as follows:

1. Executives are paid on the basis of an annual salary.
2. Salesmen are paid on the basis of a weekly salary plus a commission on net sales.
3. Office personnel are paid a straight salary.
4. Warehousemen and drivers are paid by the hour.

A separate payroll book is kept for a record of weekly wages and deductions. No proof of this book is made quarterly when the various State and Federal taxes are paid, but this task is left to the accountant at the time of his annual audit.

Sales returns and allowances are recorded in the sales journal from memo sheets, while purchase returns and allowances are recorded in the purchases journal. Special columns in these journals enable doing this efficiently, thus eliminating special journals or general journal entries for these items.

There is no departmentalization of products nor specific warehouse assembly routine.

General ledger accounts are classified according to their nature, no attempt being made to classify them according to functions.

No use is made of standard costs in any phase of the operations, nor is any attempt made to determine the profitability of controlled brands nor of customers.

There is no pretense of a budget, expenses being paid as they

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are incurred, with sole dependence upon the judgment of the vice-president in regard to future operations. If cash becomes too low, a loan is negotiated with the bank. This becomes a dangerous policy in an organization of this kind.

These are the major items in the organization and policies of the concern. Where possible, a still more detailed study should be made if the accountant deems it advisable. The changes that are recommended in the system of this illustrative establishment are outlined at the end of each of the following sections, a new phase being treated each time. Those relating to the organization itself are presented as follows:

2. Proposed Organization

The preceding section outlined the present organization. Many of the facts stated dealt with the accounting system rather than purely with the organization itself. These facts were presented purposely to give the reader as complete a picture of present operations as time and space would permit. However, in presenting the proposed organization, the author will deal with the organization itself in this section. The accounting aspects of the new system will be treated in later sections.

In outlining the new organization the author will present only those changes which should be made in the present structure.

The corporate form of organization is by far the best for such a concern as this. The large investment required is usually too great a risk and amount for an individual proprietorship or partnership. Con-

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sequently, no change is recommended in the basic form of the organization, but changes in duties are recommended as follows:

Vice-President

1. His duties are too great in number. He has the concern in the palm of his hand. No operations can be carried on without him.
2. The duties of buyer should be assigned to the clerk who is actually working in the warehouse. This would enable the vice-president to concentrate his efforts on selling, general management, and study of credit, etc.

Clerk

1. He should be given the duties of buyer and of being responsible for the perpetual inventory, once a new one is installed.
2. He should also have complete charge of the warehouse, serving in the capacity of warehouse supervisor.
3. He should be second in control of the whole concern, taking over in the absence of the vice-president.

Helen Jones

1. She should be assigned to the perpetual inventory records when the new system is in operation. If necessary, due to the volume of items to be handled, an additional clerk should be hired to help on the inventory and catalogues.

These are the only changes recommended in the administrative

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functions of the organization. It will be noted that the president was given no additional duties in the new arrangement, even though his duties, if any, in the old were not specific. This is due to the fact that the position is held by John Graham, head of the Graham family, and is mostly an honorary or nominal position. As far as actual duties are concerned, the office of vice-president could be eliminated if the operations performed by that executive were carried on by the president. However, this is presented as an illustration of one of the peculiarities that the accountant is likely to meet in a concern of this type.

The remainder of this thesis will treat of the various accounting records and problems of control for a wholesale grocer. In each illustration of the Graham Wholesale Grocery, only the new aspects of the accounting system will be presented, the present aspects having already been outlined.

Sales & Purchase Records

II. The Sales and Purchase Records

A. Sales Record

1. Sales Order Routine

The sales order form and the subsequent order routine should be so designed as to permit the most efficient recording, assembling and delivering of the order, recording of the sale and posting of the perpetual inventory. The forms and methods that could be used are numerous. The importance of selecting the proper ones was brought out in a survey conducted by the U. S. Department of Commerce among wholesale grocers (1):

"In many houses, the method of handling the order from the time it is received in the office until the invoice is sent to the warehouse has been developed in an extremely haphazard and wasteful manner-----Many useless forms and unnecessary steps were found in the course of this survey, and yet much essential information was not available."

The steps involved in order routine are as follows (2):

1. Registering orders
2. Credit approval
3. Prices, weights, and extensions
4. Stock records
5. Stock rooms
 - a. Filling from a single copy of the order

- (1) U. S. Department of Commerce, Bureau of Foreign & Domestic Commerce. Effective Grocery Wholesaling. U. S. Government Printing Office. Washington. 1941. Page 11.
- (2) Beckman, T. N. Wholesaling. The Ronald Press. New York. 1936. First Edition. Page 454.

Sales & Purchase Records

b. Filling from departmental order copies or floor slips

These steps presuppose the writing of the order either by the salesman when he receives the order or by an office clerk after the salesman sends in the order. The former is the nontranscription method and the most commonly used order routine in the wholesale grocery trade today (1). The latter is called the transcription method of order routine.

Under the nontranscription method, copies of the order that are written in the field by the salesmen are used throughout all steps of the order routine. Under the transcription method, the clerk rewrites the orders on different forms, which forms serve in fulfilling the necessary steps.

These methods may be further classified as follows (2):

- "1. Nontranscription methods with copies of the salesmen's orders used for order assembly.
2. Nontranscription methods with separate floor slips for use in order assembly, produced mechanically in the office.
3. Nontranscription methods of cash and carry and will-call business.
4. Transcription methods with a sequence of invoice lines the same as that of the merchandise in the warehouse."

The first of these classifications has already been mentioned.

(1) U. S. Department of Commerce, Bureau of Foreign & Domestic Commerce. Effective Grocery Wholesaling. U. S. Government Printing Office. Washington. 1941. Page 86.

(2) Ibid.

Sales & Purchase Records

It is usually found most useful in concerns where the orders can be assembled on one floor. Where orders are assembled on two or more floors at the same time, too many copies of the order would be required, resulting in illegible sheets as the copies increase. The second class of nontranscription order would serve best in such a case.

This requires that separate floor slips be produced by machines in the office. The original order as written by the salesman is still used as the sales invoice, but the additional slips are used for assembling the order in the warehouse.

The third class is specially designed for an establishment which sells on a large cash and carry, or will-call basis. This requires that the order be taken and filled while the customer waits or before he calls for the order. It calls for faster work on the part of all concerned. This routine usually differs from the others in that the invoice is being priced and extended in the office while the order is being filled from another copy in the warehouse, or the customer pays for the goods and then takes the receipted invoice to the warehouse to have the order assembled.

The transcription method is used where the order sheet is of such a design that it cannot be used as a sales invoice. This is usually the case where the order sheet carries a list of all merchandise sold. Such a sheet would not serve as a proper invoice to a customer who usually buys only a relatively small number of the various items offered at any one time. The order sheet is the basis for transferring the items

Sales & Purchase Records

sold to a regular sales invoice.

The wholesaler must ascertain the type of business he is going to do and how his orders are going to be received. The system man must then design the order form and order routine accordingly.

The order routine should provide for fulfillment of the steps mentioned previously. When there is no definite routine for handling orders, invoices become lost, delays occur, and ill-feeling results.

The registering of orders is important, for orders can be followed up by the register numbers given them. When the invoices are sent to the warehouse for assembly, the entry in the register serves as a check on whether or not the sheets were returned to the office or the receipted delivery invoice returned by the driver. When invoices are not numbered or registered and they become lost, the old "buck-passing" results in the salesman's claiming that he turned the orders in, while the warehousemen and office personnel disclaim ever having seen them. Where invoices are not prenumbered, they must be given a number at the time of registering; where they are prenumbered, registration is simply a matter of recording the invoice number in a special book.

Credit approval need be passed only on new accounts or on accounts which have been slow in payment. This presupposes a credit investigation department and a close account of the ages of accounts receivable. A list of the doubtful accounts furnished the pricing and extending clerk will serve as a check on orders from old customers. Orders from new customers can be approved by the head of the credit department or

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by a responsible executive when they are received in the office.

Pricing, weights and extensions can be performed before or after the order is assembled. In the former instance, the invoices must be returned to the office for correction when they contain items that are found to be out of stock. In the latter case the order is all assembled prior to pricing, etc. so that there is no need for further correction. It would seem that this would be the better method, but the needs of the individual concern may require the former.

Where a perpetual inventory is kept, a copy of the sales order must be used for posting to the inventory records. This can be the same copy used for posting the accounts receivable detail, or it can be a separate one, depending upon the operations of the office.

Some concerns fill all orders from one copy of the sales invoice, while others use separate copies or departmental and floor slips. Where the concern is large and simultaneous order assembly from several departments or floors is desired, the latter method will serve best. Otherwise, the former is the least expensive and most efficient.

A copy of each invoice should be used for distributing the sales and cost of sales for each department on a daily sales summary sheet. Monthly totals of departmental distribution are in turn transferred to a departmental sales analysis sheet (1).

Proper routing of the sales invoice and all its copies is

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 31.

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important. No set rule can be established, however, for it depends to a large extent on the size of the business, physical characteristics of the warehouse, and the type of sales order used. There are a number of business form firms who will aid in this respect by outlining the proper procedure and suggesting the proper forms.

2. Sales Discounts

In concerns where cash discounts are offered to customers for prompt payment of sales invoices, care must be taken to see that these discounts do not find their way into the collecting salesman's pockets. Close watch should be kept of discount periods, and any unusual discounts taken in excess of the period should be investigated.

No special record or form is necessary for recording the discounts, a notation being made by the salesman of the gross amount owed, the discount taken, and the net cash received.

3. Sales Returns and Allowances

Special credit forms or a sales order form which plainly shows its credit status should be used in this case. When goods are returned by a customer, the adjustment manager, if there is one, should pass on whether or not the customer should be given credit. If he should be, then a credit memorandum is sent to him and copies are sent to all departments which receive copies of sales invoices (1).

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Pages 33-35.

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4. Sales Journal

The sales journal should provide columns for the date, cash sales, accounts receivable, total sales and distribution of daily sales to departments. As used here, the cash sales is merely a clearing account, the charge from the sales journal being offset by a credit from the cash receipts journal in the cash sales account in the general ledger. Where there is no need to record total daily sales in the sales journal, this column can be eliminated and account sales only recorded here.

5. Sales Returns and Allowances Journal

Where such returns and allowances are numerous, separate accounts and separate journals can be used. However, in most cases the entries can be made through the general journal or special columns in the sales journal (1).

If such a journal is used, it should provide columns for the date, the reason for the return or allowance, the order number or vendor to be credited, the credit to accounts receivable and the distribution to the various departments (2).

6. Cost of Sales Journal

Where departmental inventory accounts are maintained as an integral part of the accounting records, the distributions mentioned in

(1) Heckert, J.B. and Stone, I.J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 35.
(2) Ibid. Page 36.

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the preceding journals serve as debits or credits to these accounts according to their nature. In such a system, all sales invoices are costed and entered in a cost of sales journal which provides columns for the date, the charge to cost of sales and the credit to the various departmental accounts. Where sales and gross margin analyses are carried on to any extent, this is a useful source of information (1).

B. Purchase Records

1. Purchase Order

Whenever a buyer makes a purchase, it should be verified by a written purchase order. Separate purchase orders should be written for every purchase, even when two or more departments order goods from the same vendor at the same time (2). These orders should be made out in various numbers of copies depending upon the size and complexity of the business. Where the concern is of any appreciable size, the copies should be distributed as follows:

1. To the vendor
2. To the treasurer
3. To the buyer
4. To the receiving clerk (quantities omitted)

The purpose of omitting quantities on the copy sent to the receiving clerk is to provide a blind check. Too often if a receiving

(1) Heckert, J.B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 33.
(2) Ibid. Page 39.

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clerk knows the quantity expected, he will either fail to count at all, or make a hurried and inaccurate count.

The use of different colors for the various copies will facilitate distribution.

In some concerns a record is kept by the inventory clerk of the date a purchase order is placed and the date the order is received, together with quantity requested and the quantity actually received. Where the buyer does not require a separate record, the copy of the invoice that would ordinarily go to him will be sent to the inventory clerk. Where the buyer desires his own record, a fifth copy should be sent to the inventory clerk.

Briefly, the reasons for distributing the copies as listed above are as follows (1):

1. To the vendor - as verification of the order.
2. To the treasurer - for budgeting cash disbursements and as a check on the purchase price, if any has been agreed to.
3. To the buyer - to eliminate duplicate orders and to enable him to check the quantity of goods when they actually arrive; also, to enable him to know how much he can expect when the order arrives, should he be considering the placing of a second order due to a run on stocks.

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 39.

Sales & Purchase Records

4. To the receiving clerk - as a notation of the items expected and a list upon which he can write the various quantity figures when the merchandise actually arrives. The fact that he has the names of the items ordered enables him to detect any substitutes made by the vendor before the shipment is accepted.
5. To the inventory clerk - for completion of the perpetual inventory records.

The goods received are checked against the purchase order which then may be destroyed, or if desired, filed by departments or vendors.

All goods received should be check for quality and quantity by the receiving clerk and by a clerk of the department which will receive the goods. Their reports should be checked before approval of payment of the freight bill or purchase invoice (1).

2. Purchase Invoices and Vouchers

All invoices received from vendors should be in duplicate, should be approved by the buyer (who keeps one copy for his records), and should be given an invoice number. They should be entered in a Daily Register of Invoices Received.

"An invoice should be required for every purchase and expense item and cash transactions, except petty cash items, should be handled in the same manner as charge transactions (2)."

- (1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Pages 39-40.
- (2) Ibid. Pages 40-42.

Sales & Purchase Records

This eliminates the use of special vouchers, since the purchase invoices themselves are used as vouchers.

Naturally, there will be variations in the application of the above recommendations, for some concerns will dispense with the daily registers, invoices may not be received in duplicate; and where the concern is small, the buyer or buyers will not keep copies. However, the principal factor mentioned above, that of giving each purchase invoice and expense item an invoice number, should be followed. Where such a policy is not followed, it is usually necessary to make out a separate voucher which can be a time-consuming factor when the number of invoices is large.

Under the voucher system a special voucher with three or more copies is made out for each purchase. One copy (the original) can be so designed as to be the check with which payment will be made. The other copies serve as records, one to be kept in the vendor's file, the other for reference - filed numerically. The accounts payable at any time are the original vouchers on hand (which have not been sent to the vendor) (1).

3. Purchase Discounts

No special record need be kept of purchase discounts, entry being made either at the time of recording the purchase invoice or at the time of payment to the vendor. (See Purchase Journal, page 36.)

4. Purchase Returns and Allowances

Before goods are shipped back to the vendor, he should be notified

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Pages 45-51.

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of the intended shipment and the reason for it. Very often this will eliminate the necessity of the return if the vendor makes a price concession.

Where the return is necessary, the shipping clerk will receive instructions from the buyer; and he should send a memorandum of the shipment, together with the bill of lading or other shipping receipt, to the accounting department. This department should then notify the vendor that the shipment has been made. When the resulting credit invoice is received from the vendor, it should be entered in the general journal or in the purchase returns and allowances journal if one is kept. It should then be filed with the unpaid invoices and deducted from the next remittance to the vendor (1).

Where the goods returned have already been recorded in the perpetual inventory records, a copy of the purchase returns memorandum should be passed to the inventory clerk to serve as a basis for posting to the records.

5. Purchase Journal

The purchase journal should be so designed as to provide columns for the date, vendor's name, invoice number, the credit to trade accounts payable, and where the concern is departmentalized, the distribution of purchases to the various departments. Where a separate accounts payable

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 144.

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account for expenses is not kept, the credit would be simply to the accounts payable account (1).

Some concerns still use an accounts payable detail ledger in connection with merchandise purchases. Others use a separate voucher register. It is possible to use the purchase journal as a voucher register and eliminate a separate register and the detail ledger. In this procedure all purchase and expense invoices are entered according to their invoice number.

"The purchase journal should be in two divisions; one part covering merchandise invoices, the other covering expense invoices. Purchases of fixed equipment, because of their infrequency, should be entered in the general journal (2)."

There should be three distinct ledger accounts for accounts payable as follows (3):

1. Trade accounts payable
2. Expense accounts payable
3. Equipment accounts payable

After they have been entered, they should be placed in a tickler file for payment when due. As they are paid, an entry is made in a special column of the purchase journal stating the date paid and the check number. Thus, at any time the total of all entries not having been paid is the total of the accounts payable, and the unpaid invoices serve as the detail.

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- (1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 42.
(2) Ibid. Page 42.
(3) Ibid. Pages 42-43

Sales & Purchase Records

All the unpaid invoices may be added on the last day of each month to prove the correctness of the general ledger control.

Where freight charges are included in the purchase invoices, they should be charged to special freight accounts, which, in turn, should later be closed to the various merchandise or purchase accounts (1).

6. Purchase Returns and Allowances Journal

This journal is necessary only where such returns and allowances are numerous; otherwise such entries can be made through either the general journal or special columns in the purchase journal.

If it is used, it should provide columns for the date, vendor's name, amount of the debit to accounts payable, and like the purchase journal, columns for distribution to the various departments (2).

C. Graham Wholesale Grocers, Inc.

1. Sales Order Routine

A nontranscription method of sales order in which one copy is used for assembling the order is recommended. Inasmuch as orders are written by the salesman in the field according to the items listed in his catalogue, and the warehouse is comprised of only a one-story building, there is no need to have the order rewritten by the clerks, or additional copies or slips made for assembling.

When the salesman writes the order in the retailer's store, he

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Pages 42-43
 (2) Ibid. Page 45.

Sales & Purchase Records

should make an original and two carbons. These three sheets should be turned in to the office where they will be given a register number and recorded in the sales invoice register. The office clerk should then route all three copies to the warehouse where the order will be assembled, short items noted on the sheets, the sheets initialed by the chief warehouseman, and then returned to the office.

Next, the pricing clerk will price and extend the invoices, keeping the triplicate in the office and sending the other two copies back to the warehouse to accompany the order when it is delivered. The driver will have the customer sign the original as a receipt and will give him the duplicate as his invoice. The original will then be returned to the office and will serve as the basis for entry in the accounts receivable detail. In the meantime, the triplicate will serve as the basis for posting the perpetual inventory records, and as a check on the return of the receipted invoice by the driver.

After the entries have been made in the sales journal and the accounts receivable ledger, the original should be costed and filed according to salesman to be used as the basis for sales analysis and commissions; the triplicate should be filed by invoice number for future reference.

This method of handling the sales invoices enables accurate account to be kept of the general routine of operations, yet provides the sales information necessary for sales analysis and distribution by the public accountant whenever he desires to make them.

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An illustration of a sales order form of the type mentioned is shown in Figure 1.

2. Sales Returns and Allowances

Sales returns and allowances should be recorded on a credit memorandum slip, a copy of which is to be given to the customer. The original will serve as the basis for an entry in the sales journal. The slip will then be filed with the original invoice.

3. Sales Journal

The sales journal should record both cash and charge sales. Inasmuch as each sales invoice is numbered, the daily sales can be entered as a total, reference being made only to the invoice numbers of the orders. Columns for the debits to cash sales and accounts receivable and the credit to sales are all that are required. The individual invoices will serve as the basis for posting to the accounts receivable detail.

This procedure eliminates the extra work that would be necessitated if each sales invoice were recorded in the sales journal individually and then posted to the accounts receivable detail.

An illustration of the sales journal is presented in Figure 2.

4. Purchase Orders

Each time he places an order, the buyer should fill out a purchase order sheet in duplicate, sending the original to the vendor and giving the duplicate to the inventory clerk who will make an

An illustration of a paper money form of the same mentioned

is shown in Figure 1.

2. Paper Money and Illustration

As an example of a money form, the illustration shows a paper money form of the same mentioned in Figure 1. A copy of which is given in the enclosure. The original will be sent to the bank for its own use. The copy will be filed with the original illustration.

3. Paper Money

The paper money form is a paper money form of the same mentioned in Figure 1. A copy of which is given in the enclosure. The original will be sent to the bank for its own use. The copy will be filed with the original illustration.

This money form is a paper money form of the same mentioned in Figure 1. A copy of which is given in the enclosure. The original will be sent to the bank for its own use. The copy will be filed with the original illustration.

4. Paper Money

A paper money form of the same mentioned in Figure 1.

Central Wholesale Grocers, Inc.

Distributors of
Dial 3-9561Distributors of
Dial 3-9561

QUALITY IMPORTED AND DOMESTIC PRODUCTS

131 SHREWSBURY STREET
Worcester 4, Mass., _____ 194 _____

131 SHREWSBURY STREET
Worcester 4, Mass., _____ 194 _____

Sold to _____ Salesman _____

Sold to _____ Salesman _____

Address _____ City _____

Address _____ City _____

[illegible]

NO CLAIMS ALLOWED AFTER FIVE DAYS OF RECEIPT OF GOODS

N^o 4317

Central Wholesale Grocers, Inc.

Distributors of

Dial 3-9561

QUALITY IMPORTED AND DOMESTIC PRODUCTS

131 SHREWSBURY STREET

Worcester 4, Mass., _____ 194

Sold to—

Salesman

Address-

City.

[illegible]

TOTALS

NO CLAIMS ALLOWED AFTER FIVE DAYS OF RECEIPT OF GOODS

No 4317

Sales Journal

Accounts Receivable

Sales

Sales

Dr.

Cr.

Ret. &
Allow.

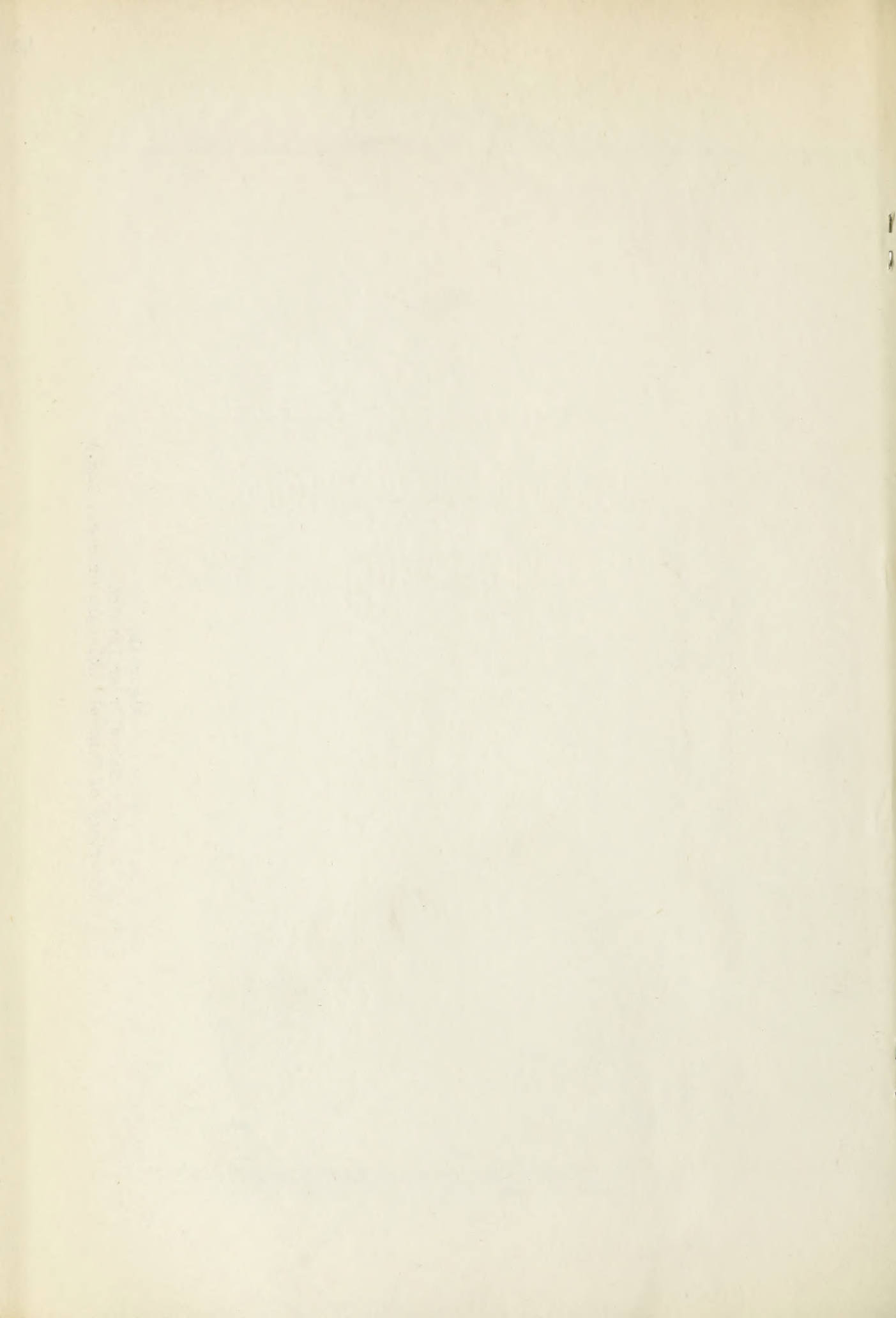
Cr.

Distribution by Salesmen

43

REMINGTON RAND INC.

MADE IN U. S. A.



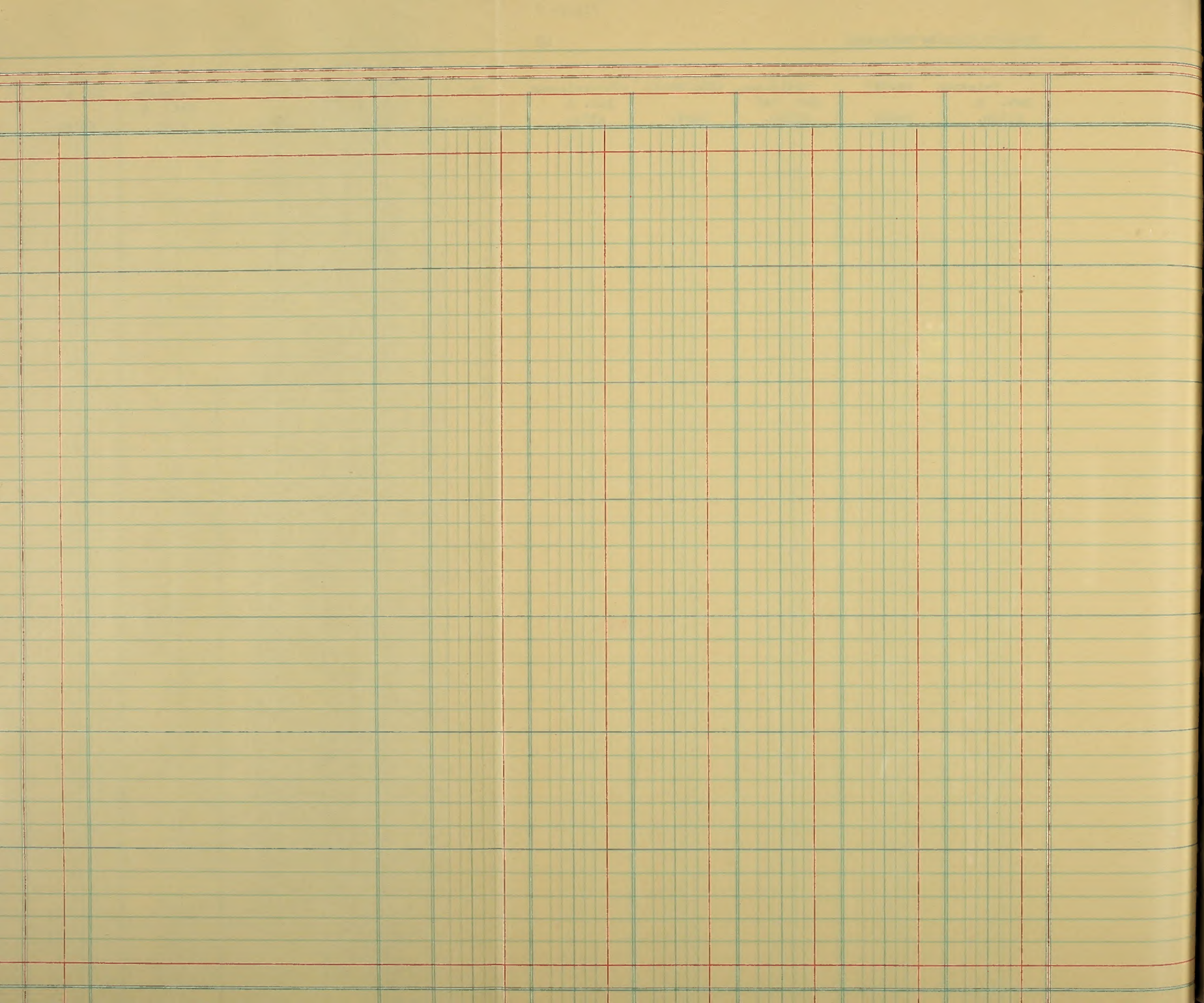
Distribution by Salesmen

43

REMINSTON BAND INC. MADE IN U. S. A.

FORM NO. AR0X

Salesman No. 1		Salesman No. 2		Salesman No. 3		Salesman No. 4		Salesman No. 5	
Ret. & Allow.	Sales	Ret. & Allow.	Sales	Ret. & Allow.	Sales	Ret. & Allow.	Sales	Ret. & Allow.	Sales



Sales & Purchase Records

appropriate entry on her records (1). This same duplicate can then be used by the pricing clerk for checking against the purchase invoice when the merchandise is received. Once this checking is completed, the purchase order can be attached to the office copy of the purchase invoice.

This method provides a safe and efficient means of keeping account of purchase commitments.

5. Purchase Invoices

Before approval is given, purchase invoices should be checked against the actual quantity and quality of the merchandise received. The check for quantity should be made either by the head warehouseman or the buyer, but the check for quality should be made by the buyer.

When the check has been made, the invoice should be initialed and sent to the office where the pricing clerk will check the prices and extensions. If they are found to be all right, she will sign her name, keeping one copy of the invoice for herself, and return the signed copy to the driver. She will then note any cost price and subsequent selling price changes on her price records.

The purchase invoice kept in the office should be given an invoice number, entered in the purchase journal, and then filed in a tickler file to await payment.

6. Purchase Returns and Allowances

These returns and allowances should be recorded on memorandum

(1) See Page 127 - Perpetual Inventory System

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slips pending receipt of a credit invoice from the vendor. These credits should be handled in the same manner as was mentioned previously in this chapter, entry being made in the purchase journal.

7. Purchase Journal

The purchase journal should serve as a voucher register in order to eliminate the present work of keeping a detailed accounts payable ledger. The procedure under such a method is the same as that explained in the paragraphs dealing with purchase journals, and no further mention need be made of it here.

An illustration of a purchase journal that can be used as a voucher register is shown in Figure 3.

8. Changes in Duties of the Personnel

The elimination of the accounts payable detail ledger enables the bookkeeper to devote some of her time to other work. By relieving the pricing clerk of some of her work, such as helping with the customers' statements each week, the latter will have the time to cost sales invoices, a task never before performed in the concern (1).

DATE OF INVOICE			NAME	OUR INVOICE NO.	CREDIT ACCOUNTS PAYABLE	✓	MISCELLANEOUS CREDITS	ACCOUNTS AFFECTED	CHARGE ACCOUNTS PAYABLE	✓	DATE PAID
MONTH	DAY	YEAR									
			Amounts Brought Forward								
				50							
				51							
				52							
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				97							
				98							
				99							
			Amounts Carried Forward								

Ledger Accounts

III

Ledger Accounts

A. Sales and Purchase Accounts

The preceding chapter has dealt with the method of handling sales and purchase invoices and recording them in the books of original entry. It is necessary that these entries be summarized periodically and posted to the sales account and a purchase account in the general ledger. If the company is large enough, separate sales and purchase accounts may be kept for each department. These may be kept in the general ledger or a special detail ledger may be provided with control accounts maintained in the general ledger (1).

Sales and purchase returns and allowances may be handled in the same manner. Where they are sufficiently numerous to warrant it, returns should have an account separate from allowances.

The general ledger should also contain accounts for sales discounts and purchase discounts. Where the difference between cost and sales price is small or negligible, the latter account is important in making a margin, since it reduces the cost of goods sold.

B. Expense Accounts

1. Classification and Allocation of Expenses

In any business it is usually an easy matter to classify expenses according to their nature, such as:

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 72.

Ledger Accounts

1. Salaries and wages
2. Rent
3. Telephone and telegraph
4. Heat, light, power, etc.

It is usually a more difficult matter to classify them according to the functions performed by incurring these expenses. For example, rent is usually paid in a lump sum covering the warehouse and the office. The former performs the functions of receiving, handling, and shipping, while the latter is responsible for the administrative functions of the concern. The question now arises as to how much rent should be charged to warehouse expense and how much to administrative expense.

The question becomes further complicated when the concern is departmentalized, for the expenses should then be charged to the various departments, just as sales and purchases are credited and charged to them respectively, in order to permit the determination of profit or loss by departments. The following is an illustrative list of departmentalization of merchandise for a wholesale grocer (1):

1. Sugar
2. Coffee
3. Tea
4. Canned goods
5. Canned milk
6. Dried fruits, including nuts

(1) Beckman, T. N. Wholesaling. The Ronald Press. New York. 1936. First Edition. Page 95.

Ledger Accounts

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2. Rent
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4. Heat, light, power, etc.

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(1) Beckman, T. N. Wholesaling. The Ronald Press. New York. 1936. First Edition. Page 95.

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7. Extracts, seeds and spices
8. Dried beans and peas
9. Farinaceous foods
10. Jams, jellies and preserves
11. Syrups and molasses
12. Candy
13. Condiments
14. Cheese, salt and provisions
15. Beverages and fountain supplies
16. Miscellaneous edibles
17. Cigars, cigarettes and tobacco
18. Smoker's sundries
19. Soaps and cleaners
20. Paper products
21. Tires and accessories
22. Drugs, notions and polishes
23. Miscellaneous non-edibles

Not only are these departments responsible for the operating expenses directly incurred as a result of their existence, such as shipping and handling expenses, but they should be charged with the costs of selling the merchandise, such as general selling expense, truck and delivery expense, etc. This necessitates the classification of expenses according to functions and the distribution of these functional expenses to the various departments on predetermined bases. Such allocation should

Ledger Accounts

not be applied to nonoperating income and expense items, since department managers usually have no control over them.

The functions performed by individual concerns vary, but the following list is typical:

1. General selling expenses
2. Shipping and handling expenses
3. Truck and delivery expense
4. Occupancy expense
5. Investment expense
6. Credit and collection expense
7. Office and accounting expense
8. General expense

The bases for distribution of these expenses to departments are (1):

<u>Expense Group</u>	<u>Basis of Allocation</u>
1. General selling expense	Budgeted sales per department
2. Shipping and handling expense . .	Weight or tonnage handled

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 87:

"The distribution of functional expenses to the departments should be made on loose-leaf analysis sheets, which should be bound in an analysis record. The functional expense accounts should not be closed throughout the year. At the end of the year they should be closed to the departmental profit and loss accounts. Current department profit and loss information may be taken directly from the analysis sheets."

Ledger Accounts

3. Truck and delivery expense
 - a. In-shipments Weight
 - b. Out-shipments Weight
 - c. City delivery Number of orders delivered
4. Occupancy Floor space occupied
5. Investment Average value of inventory
6. Credit and collection expense . Sales
7. Office and accounting expense . Periodic analyses and time studies
8. General Total 1 to 7

Other methods should be substituted under special circumstances.

Where a study is being made of the profitability of carrying a present department, or instituting another one, the functional expense distribution is not enough. An analysis must be made of the fixed and variable expenses applicable to the department. If the department cannot, or will not, pay for all of its variable expenses, it should be dropped or rejected. If it pays for all of its variable and part of its fixed expenses, then it will be profitable to keep it, since the fixed expenses would have to be sustained by other departments if the one under consideration were dropped or rejected.

Just as profit and loss by departments can be determined by the allocation of the income and expense, so also can the profit and loss of commodity lines, brands, or customers be determined. These are treated in Chapter V under Standard Cost.

This allocation of cost to commodities and customers is used

Ledger Accounts

to answer questions concerning the profitability of catering to certain customers, of carrying certain brands or lines, of building a new warehouse, of keeping certain territories and adding new ones, of seeking rapid turnover of stocks or keeping large inventories.

Where it is possible to do so, distribution of expenses by functions should be made at the time the expense is recorded in the books of account. Where this is not possible, distribution should be made according to a natural classification, these classes being allocated later on special analysis sheets (1).

Various expense accounts must be supported by accurate and detailed records. For example, delivery expense should be supported by expense sheets for each truck, and salesmen's expenses by their itemized expense vouchers.

In some concerns using standard cost, the cost system is integrated in the general ledger accounts (2). Where this is so, additional expense accounts for variations from standard are required. Thus, entries in the regular expense accounts will be made at standard, the variances from standard being entered in these variation accounts. At the end of the fiscal period, these accounts are closed to profit and loss.

C. Balance Sheet Accounts

The balance sheet accounts should be titled according to the

(1) Longman, D. R. Distribution Cost Analysis. Harper & Bros. New York. 1941. Page 47.

(2) See Chapter V.

Ledger Accounts

nature of the asset, liability or capital item. This is usually not difficult, except where items are of relatively the same nature, such as in the case of accounts receivable from trade customers and those receivable from others. Where the amount of accounts receivable and payable from and to persons other than customers or vendors is not appreciable, one account may be used for receivables and another for payables.

Separate asset and depreciation reserve accounts should be maintained for each class of depreciable asset. Thus there should be accounts for delivery trucks, salesmen's cars, etc. These should be supported by detailed records showing the history of the asset.

D. Other Accounts

When a concern is large enough, subsidiary ledgers other than the accounts receivable subsidiary should be kept. J. Brooks Heckert mentions such ledgers as follows (1):

- "a. The subsidiary ledgers for merchandise inventories consist of the perpetual inventory or stock records classified by departments."
- "b. The fixed asset accounts and their reserves for depreciation should be supported by a detailed plant ledger with separate divisions for each control account. Within each division, the subsidiary accounts should be arranged departmentally."
- "c. Files of unpaid invoices constitute the subsidiary records for accounts payable."

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting & Control. McGraw-Hill Co., Inc. New York. 1935. Page 66.

Ledger Accounts

"d. The capital stock accounts should be supported by the usual capital stock ledgers."

E. Design of the Accounts

Although the ordinary "T" account is probably the most widely used ledger account, there may be variations in the design which will better serve the particular needs of the individual concern. For instance, some wholesalers or accountants may want a running balance of each account in all ledgers. This would require a balance column in addition to the debit and credit columns. This third column may be in the center of the sheet or to one side.

Again, the accountant may desire a running balance in the accounts receivable detail ledger only, allowing use of regular two-column ledger sheets in the general ledger.

Such problems must be worked out in each case and are here presented only for the reader's consideration.

The accounts should be placed in the general ledger according to their classification as asset, liability, capital, income or expense accounts. Numbers are often used to facilitate reference to the various accounts and to save time and space in books of original entry. Where used, these numbers should be grouped according to the classifications mentioned above.

F. Graham Wholesale Grocers, Inc.

1. Sales and Purchase Accounts

Ledger Accounts

Just as in the usual wholesale concerns, there will have to be accounts for sales, purchases, sales discounts, purchase discounts, and returns and allowances of both sales and purchases.

Due to the fact that many packing houses ship on sight draft bills of lading, a great proportion of the merchandise purchased is paid for while it is still en route from the vendor. Such purchases should be kept in a separate account until the goods have been received. Consequently, a new account called merchandise advances should be set up, entries being made as follows:

- a. At time of payment of the sight draft:

Dr. Merchandise Advances	Cr. Cash
--------------------------	----------

- b. At time of receipt of the goods

Dr. Purchases	Cr. Merchandise Advances
---------------	--------------------------

This separation enables the accountant, the bookkeeper, or the buyer to tell at a glance the value of the merchandise in transit.

2. Classification of Expense Accounts

Inasmuch as the concern is small, no departmentalization need be done. Where possible, costs should be classified according to the functions of selling, warehousing, delivery and general administrative expenses. Periodically the expenses that cannot be so classified should be apportioned to the various functions. The first three functions correspond to the first three expense functions listed at the bottom of Page 47. The last includes functions 4-8 as shown on the same page.

Ledger Accounts

The expense incurred in this concern, classified according to functions, should be:

1. Selling expenses
 - a. Salesmen's salaries
 - b. Salesmen's commissions
 - c. Salesmen's traveling expenses
 - d. Advertising
 - e. Miscellaneous selling expense
2. Delivery expenses
 - a. Truck repairs
 - b. Gas and oil
 - c. Drivers' salaries
 - d. Truck insurance
 - e. Delivery supplies
 - f. Truck license and taxes
 - g. Depreciation - truck
 - h. Miscellaneous delivery expense
3. Warehousing expense
 - a. Warehouse salaries and wages
 - b. Warehouse repairs
 - c. Warehouse rent
 - d. Warehouse supplies
 - e. Insurance on inventories
 - f. Miscellaneous warehouse expense

Ledger Accounts

4. General management and office expense
 - a. Officers' salaries
 - b. Office salaries
 - c. Office supplies
 - d. Telephone and telegraph
 - e. General repairs
 - f. Office rent
 - g. Bad debts
 - h. Miscellaneous general expense
 - i. Taxes - property, etc.
 - j. Charity and donations
 - k. Cash over and short
 - l. Heat, light and power
 - m. Insurance
 - n. Interest expense
 - o. Legal and audit
 - p. Federal income taxes
 - q. State income taxes
 - r. Federal old-age benefit taxes - employer
 - s. Massachusetts unemployment compensation taxes
 - t. Federal unemployment compensation taxes

"The Harvard Business Research Bulletin #8" (1) lists several

(1) Harvard University Graduate School of Business Administration.
"System of Operating Accounts for Wholesale Grocers." Bureau of
Business Research Bulletin #8. Harvard University Press. Cambridge,
Massachusetts. 1916.

Ledger Accounts

other accounts as essential to any wholesale grocery business, but it has not been the author's experience to see any cases in which such accounts would be used, at least not in a concern of the size outlined here. It is understood that a concern with larger capital and sales volume would require many more detailed accounts in order to have a sufficient record of its transactions.

The Handbook of Accounting Methods presents just such a detailed list of accounts for a large concern (1).

It is not feasible to determine the profitability of all product groups, brands, or customers at all times, for the expense would be prohibitive. An analysis to determine such profitability should be undertaken only when it is deemed necessary and it should be limited to the particular group, brand or customer in question. Such a project would have to be undertaken by the concern's accountant and would require a further breakdown of accounts than here shown. However, the classification presented is suitable for the ordinary requirements of the company (2).

Standard cost should not be used here as an integral part of the general ledger expenses owing to the size of the business and the inexperience of the office staff. However, standards should be set for the various expenses listed above and periodic comparison of the actual with the standards made by the accountant or the general manager.

(1) Jordan, N. E. "Accounting for Wholesalers." Lasser, J. K. Handbook of Accounting Methods. D. Van Nostrand Co., Inc. New York. 1943.

(2) See Chapter V for further discussion of the methods of determining net profit by commodities, customers, etc.

Ledger Accounts

3. Balance Sheet Accounts

a. Current Assets--The current asset accounts of a wholesale grocer do not differ in great respect from those of any other concern.

Essentially they are five:

- 1) Petty cash
- 2) Cash in bank
- 3) Accounts receivable
- 4) Merchandise inventory
- 5) Merchandise advances

The question of whether or not notes receivable and investments should be added to this list depends upon the practices of the individual concern. For purposes of this thesis, they will be eliminated.

Merchandise advances represent payments on drafts.

b. Fixed Assets--The following fixed asset accounts assume that the concern rents the land and buildings that it occupies, as is evident by the fact that a rent account is listed in the expense section of the profit and loss accounts:

- 1) Delivery equipment
- 2) Office equipment
- 3) Salesmen's cars

c. Deferred Items--Prepaid items most likely to occur in a wholesale grocery business are:

- 1) Prepaid expenses
 - a) Prepaid insurance
 - b) Prepaid advertising

Ledger Accounts

2) Salesmen's advances

d. Current Liabilities--Due to the large quantities of merchandise that a wholesale grocer is required to keep in stock, and owing to the fact that some packing houses and producers ship on sight draft bills of lading, a small concern does not always have the ready cash to meet creditor requirements. This necessitates borrowing money from banks. Consequently, a notes payable-banks account is a necessity.

On the basis of the experience of the Graham Wholesale Grocers, Inc., merchandise is bought either on open account or sight draft bill of lading, which eliminates any need for a notes payable-trade account. Rather than take the chance of receiving poor credit standing by failing to pay on open account within the time allowed, recourse is made to the bank, if necessary, so that no trade notes payable arise from this source.

Accounts payable is the only other large liability item except, of course, where a concern owns its own property and has a mortgage against it. All accounts payable arise from trade transactions; thus only one account is necessary.

Accrued items occurring at the time the books are closed are:

- 1) Accrued payroll
- 2) Commissions payable
- 3) Accrued taxes
- 4) Other payables

e. Reserves--The reserve accounts necessary for such a system as this are the following valuation accounts:

Ledger Accounts

- 1) Reserve for bad debts
- 2) Reserve for depreciation - furniture and fixtures
- 3) Reserve for depreciation - delivery equipment

These reserves need no explanation, since they are common to bookkeepers and accountants alike.

f. Capital--Capital stock and surplus are the only two remaining balance sheet accounts required. Knowledge by the reader of the items usually included in these accounts is assumed; consequently no further explanation is deemed necessary.

4. Design of the Accounts

A standard "T" account will suffice for both general ledger and accounts receivable ledger sheets. An illustration of such an account is shown in Figure 4.

Although no specific space is allowed for it in the illustration, accounts receivable should show the credit terms for each customer where such terms vary with the customers. This enables the bookkeeper to check the amount of discount taken when payment is received.

Due to the size of the business and the comparatively small number of accounts, there is no need to number the accounts as is recommended by some texts (1).

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 60.

SHEET NO. _____

NAME _____

ADDRESS _____

REMINGTON RAND INC. →

MADE IN U. S. A.

FORM NO. CB00

DATE

ITEMS

FOL

✓

DEBITS

DATE

ITEMS

FOL

✓

CREDITS

SHEET NO. _____

NAME

ADDRESS

REMINGTON RAND INC. → → MADE IN U. S. A.

Figure 4
General Ledger Account Sheet

Other Books

IV

Other Books of Account and RecordsA. General Journal

A simple two-column loose-leaf journal will serve all the purposes of a wholesale grocery concern. Where entries of a particular type are quite numerous, a special journal should be used. If desired, a third column can be added to the general journal sheet for the detail, making up the figures in the debit and credit columns.

B. Cash Receipts Journal

The chief sources of cash receipts are cash sales and payments on account by customers. In the case of cash sales, the money is received directly from the customer; payments on account are received through the mail and by salesmen making collections. In handling such cash, the accountant should be careful to provide sufficient internal checks to prevent theft and errors (1). For example, in receiving cash through the mail, the mail clerk should list all cash received, sending copies to the accounting department, to the cashier (together with the remittances), and if desired, to the treasurer (2).

The accounting department should check the list with the cashier's deposit, record the payments in the customers' accounts and record the total of the remittance sheet in the cash receipts journal.

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Pages 212-213.

(2) Ibid. Page 52.

Other Books

If differences are found between the amount of remittance and a customer's account balance, the matter should be taken up with the customer immediately (1).

Remittance sheets should be kept in a binder as a permanent record.

In grocery wholesaling, there is an additional source of income; namely, payments by manufacturers for advertising. These advertisements consist of signs painted on trucks, mention of the products on letterheads, etc. Inasmuch as such income is directly related to advertising, stationery and printing and the like, it should be credited to the appropriate accounts when it is received. However, such payments do not occur in sufficient frequency as to demand a separate column.

Sales discounts will be taken in most instances if offered. Thus, where the concern has discount terms, a separate column should be provided.

Upon the basis of the above information, there should be columns in the cash receipts book headed as follows:

Net Cash, Dr.	Accounts Receivable, Cr.
---------------	--------------------------

Sales Discount, Dr.	Cash Sales, Cr.
---------------------	-----------------

Sundry Credit

a. Account Name

b. Amount

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 54.

Other Books

Other columns may be added if the needs of the individual concern require them.

C. Cash Disbursements Journal

Where the voucher register is used or where the purchase journal is used as a voucher register, the cash disbursements journal needs to have only four columns as follows:

Accounts Payable, Dr. Purchase Discounts, Cr.

Miscellaneous, Dr. Net Cash, Cr.

This is due to the fact that all purchases and expenses are recorded in the purchase register as charges to the appropriate accounts and credits to accounts payable.

Where a concern is small and the number of expenses are few compared to those of a large organization, there is no need to give an invoice number to every bill. In such a case, invoice numbers can be given to purchase invoices alone, the expense items being paid as soon as they are incurred. Thus, only the merchandise purchases will be recorded in the purchase journal, the expenses being recorded in the cash disbursements journal at the time of payment. This method would necessitate columns in addition to those mentioned above. This principle is illustrated in the section of this chapter on the Graham Wholesale Grocery System (1).

(1) See Page 71

Other Books

D. Other Records

1. Payroll

The existence of wage and hour, social security tax, and withholding tax laws makes it essential for a concern, no matter what the size, to keep a payroll of time, wages, and deductions.

Such a record must be concise, easily kept and readily proved with general ledger figures at the end of each quarter when returns are made to the Federal and State Governments. Its importance is such that it merits separate treatment when establishing an accounting system.

The book wherein payroll records are kept should be divided into four sections, one section for every thirteen weeks in the year. Employees' names should have to be written only once in each quarter, and provision should be made for a recap of the payroll and deductions at the end of every thirteen weeks. It may be used either as a journal or as a subsidiary ledger. In the former case, posting is made directly to the ledger accounts; in the latter, posting comes from the cash disbursements journal.

Salaries and wages may be paid either in cash or by check. Whichever method is used, the data should be kept in this book.

A concern that does not keep up a detailed payroll book can never be certain that its payroll figures are accurate and would experience embarrassment if visited by a deputy or agent of the U. S. Bureau of Internal Revenue.

Other Books

2. Salesmen's Salaries, Commissions and Expenses

There are three standard methods of compensating salesmen for their services (1):

1. Straight salary
2. Salary and commission
3. Commission alone, based on either sales or gross margins.

Where the straight salary method is used, there is no need to keep separate records, other than the regular payroll book mentioned in the preceding section. If desired, salesmen's salary records can be kept in a separate group in the book to enable easier reference for purposes of management.

However, where either of the other two methods is used, separate records should be kept of all payments made to the salesmen. These will be used by management in comparing the results of salesmen's efforts with the expenses incurred. These expenses should include salesmen's traveling expenses as well as salary and commission items, and thus provide a means of determining whether or not the salesman is using up as expense any profit he might bring the concern.

3. Remittances Received Records

The remittance records, mentioned previously in regard to cash receipts, should be used wherever sizable amounts of cash, checks, money orders, etc. are received through the mail. These records could and

(1) U. S. Department of Commerce, Bureau of Foreign & Domestic Commerce. Effective Grocery Wholesaling. U. S. Government Printing Office. Washington. 1941. Page 73.

Other Books

should also be used for listing cash receipts turned in by salesmen.

They should provide columns for:

1. Date
2. Name of the customer or salesman
3. Net cash
4. Sales discount
5. Gross amount of the bill
6. Name of the person making the list
7. Checks of the posting to the individual accounts

Unless the concern is too small to warrant their use, these sheets are invaluable for purposes of internal check, tracing discrepancies in cash and fixing responsibility for errors.

4. Delivery Expense Records

Of the expenses that have to be paid out of gross margin, selling expenses are the greatest, and delivery expenses are second in importance. Due to this fact, detailed records should be kept of all delivery expense. These records should include the following summaries and reports, depending upon the size of the concern (1):

1. Truck trip report (or expense record for individual trucks)
2. Monthly summary of country truck operation
3. Truck service report

(1) U. S. Department of Commerce, Bureau of Foreign & Domestic Commerce. Effective Grocery Wholesaling. U. S. Government Printing Office. Washington. 1941. Pages 128-137.

Other Books

4. Tire location and mileage report
5. Tire record (each individual tire)

Where it is too difficult to keep a record of trucks by ordinary methods, a clock-operated recording device can be used. This automatically records the amount of time the truck is in motion and the amount of time it is standing still, thus enabling a trace of how the driver spent his time on the trip.

5. Other Records

The foregoing covers the majority of the records required by a wholesale grocery. Although the number will vary with the needs of each concern, these, plus a few mentioned below, cover the general requirements of the wholesaler:

1. Petty cash record
2. Distribution of sales and sales returns and allowances
by salesman

The latter is useful in determining commissions or profit and loss by salesman.

E. Graham Wholesale Grocers, Inc.

1. General Journal

The general journal will be used as usual for recording correcting, adjusting, and closing entries, special journals being used for other entries. Consequently, a three-column journal sheet such as that shown in Figure 5 will suffice. This provides for a detail column as well as

JOURNAL ENTRIES FOR THE MONTH OF

19

BERNARDSON RAND LNO. 3-8 MADE IN U. S. A.

FORM NO. 5910

DAY

DESCRIPTION

ACCOUNT
NO.

✓

DETAIL

AMOUNT POSTED

CHARGES

✓

CREDITS

Other Books

the usual debit and credit columns.

2. Cash Receipts Journal

The sources of cash receipts are cash sales, accounts receivable and occasional miscellaneous income. Consequently, credit columns will be provided for these items, as well as debit columns for net cash and sales discounts.

In order to enable management to compare the amount of collections of each salesman with his sales or with the collections of other salesmen, this journal should be expanded to show the distribution of cash receipts and sales discounts by salesman.

An illustration of this journal is shown in Figure 6.

3. Cash Disbursements Journal

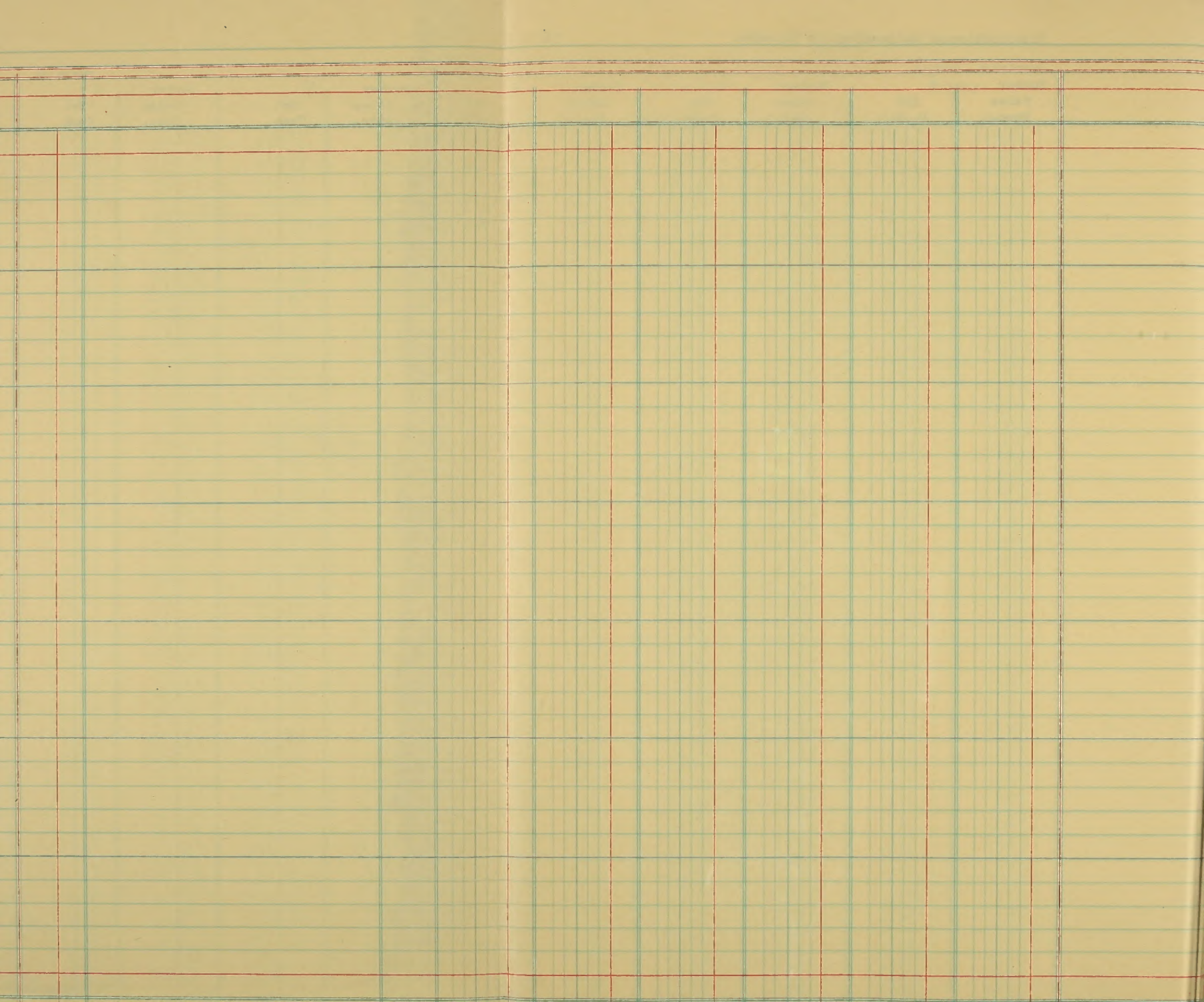
All purchase invoices should be given invoice or voucher numbers and recorded in the purchase journal. However, all expenses are paid as soon as they are incurred or shortly thereafter. Inasmuch as the treasurer, an executive of the concern, pays all bills, and they are not too great in number, there is no need to voucher these expenses. Thus, these expenses can be recorded and distributed upon payment of the bills, payrolls, etc. Once recorded, invoices supporting expenses should be filed according to the nature of the expense.

Under this arrangement only merchandise purchases should be recorded in the purchase journal and credited to accounts payable. The expense items will be recorded and distributed in the cash disbursements journal.

REHRSTON RABD INC. MADE IN U. S. A.

FORM NO. 480X

Number	1	Number	2	Number	3	Number	4	Number	5
Sales	Not	Sales	Net	Sales	Net	Sales	Net	Sales	Net
Disc.	Cash	Disc.	Cash	Disc.	Cash	Disc.	Cash	Disc.	Cash



Other Books

An illustration of this journal is shown in Figure 7.

4. Payroll

Employees' salaries, with the exception of the salesman and officers, are paid on the basis of an hourly wage rate. A payroll book embodying the principles mentioned in the paragraphs on payroll records, but allowing space for recording the daily hours, will be sufficient. Time clock cards will serve as the basis for determining the number of hours worked.

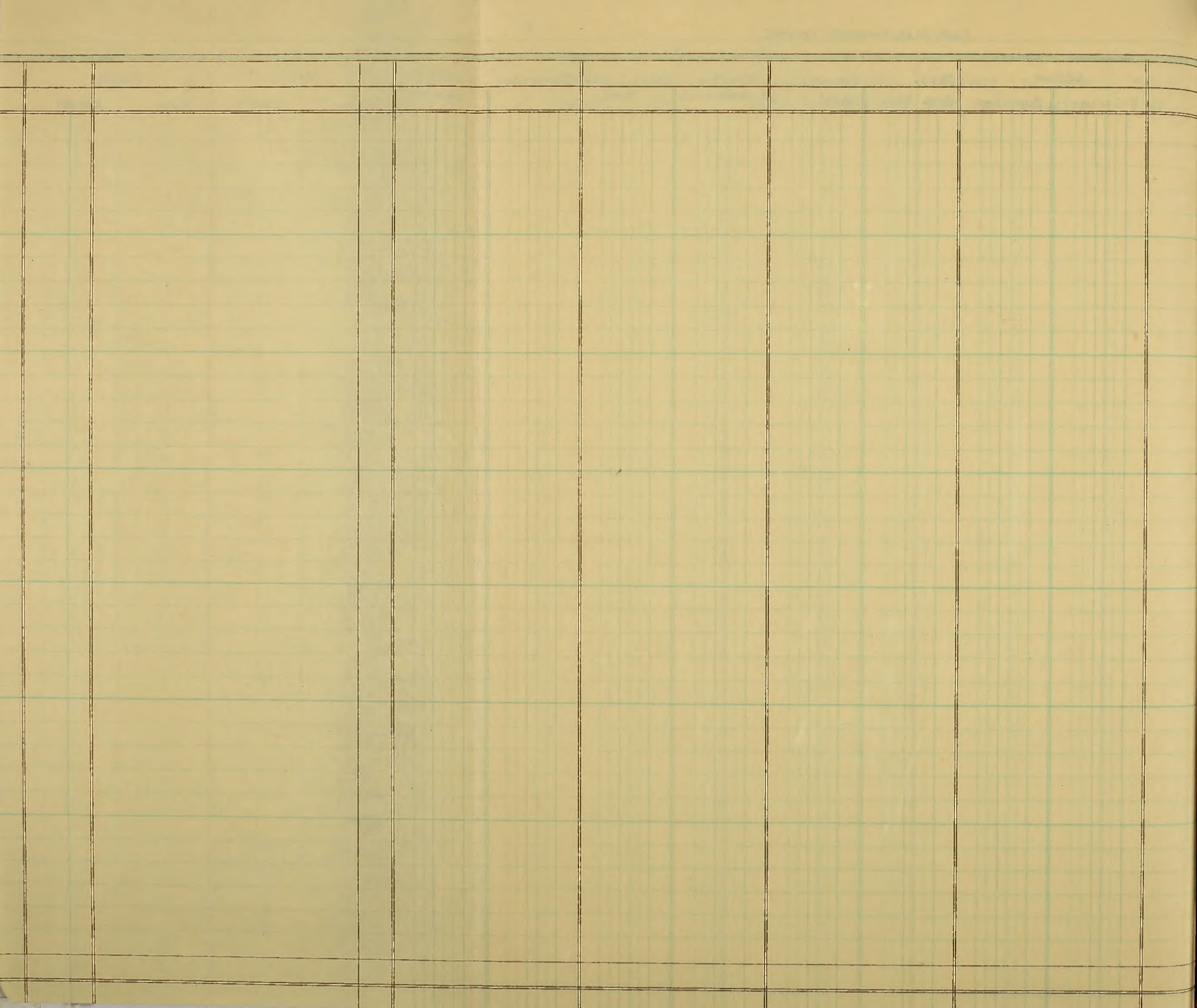
An illustration of the payroll record is shown in Figure 8.

5. Salesmen's Salaries, Commissions and Expenses

Salesmen should be paid on the basis of a straight weekly salary plus a commission based on their gross dollar margin of sales. Commissions should be computed weekly. The costed invoices used in such computation should be filed by salesman in weekly files.

These invoices will then serve as the detail for the commission figure which will appear in the other earnings column of the payroll record, enabling the salesmen's pay accounts to be kept in the same payroll book with the employees' and officers' records. The weekly salary figure for each salesman will appear, of course, in the regular rate of pay column.

Salesmen's expenses should be kept by each man in weekly detailed expense booklets. At the beginning of each new week the salesman should turn in the old expense booklets, receiving a check for the balance



RECAPITULATION OF EMPLOYEES EARNINGS AND WITHHOLDING TAX

[illegible]

DATE OF PAYMENT

[illegible]

TIME AND PAYROLL RECORD

WEEK ENDING

19

EMPLOYER

DATE OF PAYMENT

ADDRESS

TIME							TOTAL HRS.	REGULAR RATE OF PAY	AVERAGE RATE PER HR.	EARNINGS AT REG. RATE FOR TOTAL HRS.	EXTRA FOR OVERTIME	OTHER EARNINGS	TOTAL EARNINGS	DEDUCTIONS					NET PAY	
S	M	T	W	T	F	S								O. A.	VICT. TAX					
1																				
2																				
3																				
4																				
5																				
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19

DATE OF PAYMENT

ADDRESS

RECAPITULATION OF EMPLOYEES EARNINGS AND WITHHOLDING TAX

DATE →	FOR THIRTEEN WEEKS ENDING												TOTAL	BIRTH DATE	DATE EMPLOYED	DATE RELEASED	REASON FOR RELEASE	
Earnings																		1
Withholding																		2
Earnings																		3
Withholding																		4
Earnings																		5
Withholding																		6
Earnings																		7
Withholding																		8
Earnings																		9
Withholding																		10
Earnings																		11
Withholding																		12
Earnings																		13
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Withholding																		26
Earnings																		27
Withholding																		28
Earnings																		29
Withholding																		30

19

DATE OF PAYMENT

[illegible]

Other Books

and a new booklet for the ensuing week. The books then serve as a detailed record of expense checks paid to the salesmen. If it is desired by the management, a separate book can be set up showing salesmen's salaries, commissions and expenses under one cover. In the matter of expenses, there should be some means of limiting salesmen's expenditures to prevent extravagance or plugging of expense accounts. This should also be decided upon by management.

6. Remittances Received Reports

All mail is opened by the treasurer. Thus she will receive directly any remittances mailed in by customers. These should be listed on a sales invoice plainly marked to show its status. Were the concern larger, special remittance report forms should be used, but the use of a sales invoice here is less expensive and easier to handle, especially as concerns the salesmen in making their collections; the less forms that they have to handle, the better.

These invoice forms used as remittance sheets should be numbered consecutively and in a manner that will clearly distinguish them from the regular sales invoices. They can then be filed for future reference after the remittances are recorded in the cash receipts journal.

7. Delivery Expense

Due to the fact that the concern is small, there is no need to keep as many detailed records as were listed under this heading. All necessary data can be obtained from the delivery expense charges in the

Other Books

cash disbursements book and from the invoices supporting such data. Once the system is in operation, if it is deemed feasible to put a few of such records into use, it can be easily accomplished providing the clerical help has time to record the information and management the time and wisdom to use it.

8. Other Records

- a. Petty Cash--A columnar memorandum book will serve the purpose of a petty cash record, for items paid from it are small in amount, the fund itself being about \$30. The imprest system of replenishing the petty cash fund should be instituted.
- b. Distribution of Sales and Sales Returns and Allowances by Salesman--This should be accomplished by additional columns provided in the sales journal. See Figure 3 for an illustration of such a provision.

The journals and records outlined in this and the preceding chapter will provide, for a concern of this size, sufficient information for the sales and accounts receivable controls explained in the following chapters.

Standard Costs

V

Standard Costs

A. General

The subject of standard cost is most important to any concern which wishes to have close control over its operations. Successful management requires accurate knowledge as to what each employee should be doing as well as to the results that must be secured in order to justify the effort and cost. This is the essential principle of standards (1).

There is often much confusion as to the meaning of the words standards and budgets. Many people erroneously use them interchangeably. For the sake of clarification, Heckert and Stone have defined them as follows (2):

"A standard is a measure of performance. It signifies satisfactory performance under existing conditions; it is a desirable and attainable end which has been determined by someone who is qualified to say what constitutes good and satisfactory performance.

"A budget is a program and as such should be based on expected results, not standard performances. It should be revised whenever circumstances and changed conditions indicate that earlier expectations are in error."

Standards are more difficult to establish for a wholesale concern than for a manufacturing plant, but the rules on how to set standards should

- (1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 120.
 (2) Ibid. Page 120.

Standard Costs

be adhered to (1).

1. The task must be measurable.
 - a. There must have been sufficient experience or an advance survey for a basis.
 - b. The expenses must be of a repetitive nature.
2. Standards should be determined by those most competent to judge what constitutes good performance.
3. All available information bearing on the task should be carefully studied and applied in setting the standards.
4. Counsel should be had with those for whom standards are set.
5. Standards should be quickly and carefully revised to meet changed conditions.
6. The work of setting standards should be done with absolute fairness.

Once established, standard costs and actual costs must be constantly or periodically compared for differences. Where standard cost is integrated with the books of account, the comparison is constant, for the entries in the regular expense accounts are made at standard cost while the variations are entered in special variation accounts (2).

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- (1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 120.
- (2) Heckert, J. B. Analysis and Control of Distribution Costs, for Sales Executives and Accountants. The Ronald Press Co. New York. 1940. Pages 317-332.

Standard Costs

Periodic comparison is used where standards are not in the books of account but are measured against the actual figures at intervals or whenever the accountant or management deems it necessary.

It is necessary, therefore, that sufficient records be drawn up to contain these standards and to which reference can be made for comparison. Such records should show the basis for the determination of the standard and the name of those upon whose judgment they are formed (1).

The standards take numerous forms and differ according to the requirements of management in each concern to such an extent that no one set of standards can be presented. However, the following are illustrative of standards which should be determined for the sales division (2):

1. Amount to be sold to each customer.
2. Amount to be sold by each salesman.
3. Percentage of gross profit to be returned by each salesman.
4. Number of calls to be made by each salesman.
5. Average size of order to be secured by each salesman.
6. Direct expense of each salesman.
7. Percentage of direct expense to sales and gross profit of each salesman.

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 127.

(2) Ibid. Page 124.

Standard Costs

8. Percentage of advertising to sales.
9. Percentage of sales supervision expense to sales.
10. Percentage of gross profit to sales.
11. Percentage of total selling expenses to sales.
12. Average size of all orders received.

Although these illustrations are expressed in terms of either dollars or percentages, such is not true of every standard. They may also be stated in terms of the quantity of work to be done, number of orders to be filled, etc. In some cases the physical unit of merchandise or the unit of functional distributive activity is of equal, if not greater, importance (1).

B. Analysis of Costs

Standards are not used merely as a control device to determine whether or not a salesman is efficient in his work or the proper proportion of advertising to sales was maintained. By analyses of various combinations of standards, it is possible for management to determine whether or not orders from a particular customer or group of customers are profitable, whether or not a particular territory should be enlivened or dropped, whether or not the proper channels of distribution are being utilized, etc.

Such analyses range from the simple classification of expenses according to their nature to the detailed and difficult determination of

(1) Paton, W. A. Accountant's Handbook. The Ronald Press Co. New York. 1945. Third Edition. Page 300.

Standard Costs

the profitableness of selling a particular type of product to a certain class of customer in a chosen territory.

There is not time or space to treat each of these analyses in detail in this paper, but a brief summary of each will be given. For further study of the subject, the reader is referred to the books suggested in the bibliography.

The simplest form of analysis is the classification of expenses by their nature. This is the first step in all analyses of distribution cost (1). Where such a classification is sufficient for the requirements of a concern's problem, no further work need be done. However, such would usually serve only as a convenient means of recording expense amounts (1). The net result is that management has an idea of the cost of carrying on the business as a whole, when it should have a knowledge of the cost of performing specific functions (2).

This latter knowledge may be obtained by the analysis of distribution costs by functions and functional operations and serves as a particularly valuable means of cost control. The following steps must be taken in this case (2):

1. Outline the distribution functions and functional operations which are being performed and perfect an internal organization whereby the responsibility of such operations is definitely fixed.

(1) Paton, W. A. Accountant's Handbook. The Ronald Press Co. New York. 1945. Third Edition. Page 307.

(2) Heckert, J. B. Analysis & Control of Distribution Costs, for Sales Executives and Accountants. The Ronald Press Co. New York. 1940. Page 20.

Standard Cost

2. Classify the individual cost items according to functions. Where minor functional operations do not permit direct allocation to a particular operation, the cost items must be apportioned.
3. Establish **units of** measurement of functional service, in so far as this is possible.
4. Divide the total cost of each operation by the number of units of service performed. This results in a unit operation cost.

The latter step opens the way for standard unit costs and the control of costs by the application of such standards.

The two preceding types of analyses are necessary steps (in the order in which they are presented) in making more detailed analyses for the purpose of directing the distribution effort. These latter analyses can be quite numerous, depending upon the individual concern, but the following are those most frequently needed (1):

1. By territories
2. By commodities
3. By channels of distribution
4. By methods of sale
5. By classes of customer
6. By size of orders

(1) Heckert, J. B. Analysis & Control of Distribution Costs, for Sales Executives and Accountants. The Ronald Press Co. New York. 1940.
Page 24.

Standard Costs

7. By organization and operating divisions
8. By method of delivery
9. By salesmen
10. By size or number of physical units
11. By terms of sale

There can be various combinations and variations of these analyses as well as other types, but it must be realized that not all of these are necessary in any one concern, nor do they have to be made continuously. These are considerations that each concern must take into account in the light of its particular circumstances.

Although each analysis will differ in detail from the others, the following general steps should be followed (1):

- "1. Determine which analyses should be made
2. Classify the costs as to those which are direct and indirect in relation to each analysis used.
3. Select suitable bases of allocation to be applied to the indirect cost items.
4. Apply the bases selected.
5. Prepare the final analyses and their interpretation for executive use."

W. A. Paton, in the Accountant's Handbook, gives a more

(1) Heckert, J. B. Analysis & Control of Distribution Costs, for Sales Executives and Accountants. The Ronald Press Company. New York. 1940. Page 24.

Standard Costs

detailed picture of the steps in complete cost analysis (1):

1. Segregate directly applicable costs for specific allocation to the objects of analysis.
2. Select for the classification of the costs not directly applicable those functional groupings which are most suitable for the particular analysis intended.
3. Classify the costs not directly applicable in terms of the functions chosen.
4. Select an appropriate service unit for each function to be used for the measurement of the amount of service rendered or required.
5. Ascertain the number of such service units pertaining to each function.
6. Compute the unit cost of each function by dividing the total cost of the function by the number of service units involved.
7. Ascertain the number of units of service required by each object of analysis. (Commodity, customer, etc.)
8. Multiply the number of units found in (7) by the unit cost. This is done for each function in order to determine the total functional cost applicable to each object of analysis.

(1) Paton, W. A. Accountant's Handbook. The Ronald Press Co. New York. 1945. Page 318.

Standard Cost

9. Compute the total distribution cost pertaining to each object of analysis by adding the functional costs obtained in step (8) to the direct costs found in step (1).

Before an analysis can be made, careful consideration must be given to the type of analysis, the size of the territory, kind of commodity, customer or customer group, etc. for which the study is to be made. For purposes of illustration, the following reference is made to a territorial analysis as outlined by Heckert (1):

A territory is a geographical area such as a state, county, city, trading area, sales district, or other arbitrary area used by a concern as a basis for sales planning and direction. In order to be complete, an analysis of such an area must extend to sales, cost of goods sold, and distribution costs, and it should follow the physical goods rather than the point of sale.

The purpose of an analysis of this kind is twofold:

1. To control the distribution expenses within a territory.
2. To direct sales effort into the most profitable areas.

The individual concern should determine whether or not such an analysis will be beneficial to it. Most retail concerns with only one establishment, such as department stores, do not require such an analysis, whereas manufacturers, wholesalers, and chain retail stores, covering any considerable area find it of great value.

(1) Heckert, J. B. Analysis & Control of Distribution Costs, for Sales Executives and Accountants. The Ronald Press Co. New York. 1940. Page 35 and following.

Standard Costs

In selecting the territorial unit, the management must strike a compromise between too large a unit where high costs in one sector are offset by low costs in another, and too small a unit where the allocation of a high proportion of indirect costs renders the results of doubtful value. In addition to size, the unit selected should be one which is expressive of sales potentialities.

Having selected satisfactory territorial units, consideration should be given to the proper method to follow in making the territorial analysis. The procedure may be outlined as follows (1):

1. Determine the gross profit by territories.
2. Determine territorial profit after direct costs by accumulating the direct territorial distribution costs and deducting them from the gross profit.
3. Distribute to the territories their respective shares of the semi-direct costs; deduct those from profit after direct costs to arrive at territorial profit after semi-direct costs.
4. Determine the final territorial net profit by allocating to the territories their respective shares of the general or indirect costs and deducting these from the net profit after semi-direct costs.
5. Make such sub-analyses of the results of individual territories as may be deemed useful (e.g. by products, channels,

(1) Paton, W. A. Accountant's Handbook. The Ronald Press Co. New York. 1945. Page 324.

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salesmen, etc.).

Generally speaking, the procedure for all other analyses is similar to that just outlined. Were the analysis to be by commodities or customers, or some other classification, the same considerations of definition, purpose, necessity, selection and procedure would apply.

The methods of analysis of distribution costs presented thus far are quite simple compared to the method proposed by Longman in his text, Distribution Cost Analysis. In fact it is very probable that that author was referring to Heckert's method in the following quotation:

"Another important criticism that may be leveled against most of the methods in current use . . . is that they are oversimplified attacks upon a complex accounting problem" (1).

Longman's method is quite involved, but the analyst is supposed to be rewarded for his efforts by a very accurate result, free from any influencing factors which might distort it. It is questionable whether or not the method is justifiable in view of the time and effort involved and the resulting cost of the analysis.

It makes use of the functional means of cost classification, but it lists 59 different functions under which such costs can be classified (2). Of course, not all of these functions are performed by every concern, but the fact remains that the list is much more detailed than that suggested by other texts.

(1) Longman, D. R. Distribution Cost Analysis. Harper Bros. New York. 1941. First Edition. Page 65.

(2) Ibid. Page 44.

Standard Costs

Space does not permit a thorough presentation of the material presented in Longman's text but the following points are presented for the reader's consideration:

As costs are incurred they should be classified by functions at the time they are recorded. Where an expense is to be divided between two or more functions, it should be recorded in a natural classification and later allocated to the proper functions (1).

Next, the effect upon cost of labor inefficiency, price changes, and subcapacity operations should be measured and standards set for wages and materials.

These standards should be followed by standards for all functions listed for the concern.

The functions should be generally classified as repetitive and non-repetitive (2). It is now possible to measure the effect upon cost of price changes, labor efficiency, and subcapacity operations. The method of doing this is presented in the following outline (3):

A. Repetitive:

1. Segregate for each function the expenses subject to some direct control by the speed and skill of laborers.

(1) Longman, D. R. Distribution Cost Analysis. Harper Bros. New York. 1941. First Edition. Page 47.

(2) Ibid. Page 98.

Repetitive functions are those functions which are performed often enough to have standards established for them. Non-repetitive functions are those functions such as designing, statistics, and the like which are not repeated enough to have standards established for them.

(3) Ibid. Pp. 106-109.

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2. Determine standard costs for labor and materials used in repetitive functions. This may be done by:
 - a. Determining standard working work time by time and motion study.
 - b. A detailed audit.
 - c. Determining the standard number of operations that can be handled in an accounting period (allowing a reasonable margin for necessarily unproductive time).
 - d. Determining the standard quantity of materials per operation and the standard number of operations.
 - e. Calculating the labor and materials cost per operation.
 - f. Multiplying the standard cost per operation by the number of actual operations to determine the total standard cost for the period.
3. Compute standard costs for all other items of expense during the period. This usually requires the following steps:
 - a. Preparation of standard costs per operation on the basis of objective studies (similar to time and materials studies above), and multiplication of the standard cost by the actual number of operations to determine total standard costs of these elements for the period.
 - b. Careful preparation of expense budgets (for which

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objective standard per operation costs were not computed) on the assumption of capacity operation.

- c. The division of total costs as found in "b" by the standard number of operations at capacity in order to determine a standard per operation cost, followed by multiplication of the standard per operation cost by the actual number of operations in the period in order to determine the total standard cost for these elements for the period.
4. Subtract the total standard costs for the period from the actual costs to provide the total loss attributable to (1) labor inefficiency, (2) subcapacity operations, and for (3) price changes.
5. Determine the average of the actual price per unit subject to the direct control of labor.
6. Separate from the joint loss (present for expense elements subject to direct control by workers) that loss attributable to price changes. This usually is accomplished by:
 - a. Multiplying the actual price by the standard quantity (for the number of actual operations) and subtracting the total from the total standard cost for the expense element. This provides a preliminary measure of losses or gains from price change.
 - b. Multiplying the standard price by the actual quantities and subtracting this total from the total standard cost

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for the expense element. This results in preliminary measures of losses or gains from labor efficiency and from subcapacity operation.

- c. Adding the preliminary losses and gains to the standard cost and subtracting the sum from actual cost.
- d. Where there have been gains from both price change and labor efficiency, the remainder found from the subtraction in "c" may be divided as between price change and efficiency on the basis of the preliminary totals. If there is any gain shown by the preliminary measure for one factor but not for the other, a gain found in "c" may be added to the preliminary measure for the factor showing gain and any loss found in "c" may be added to the preliminary factor showing loss.

The net result of these steps is a final measure of the effect of price change upon expenses subject to labor's direct control.

7. Separate from joint loss (present for expense elements not subject to direct control by labor) that attributable to price changes. This usually requires the following steps:
 - a. Correct the total standard cost (based on standard or budget prices) for actual costs of the standard quantities.
 - b. Same as in 6 (above)

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- c. Same as in 6 (above)
- d. Determine the amount of the preliminary loss or gain from price change which might possibly have been affected by the efficiency of labor.
- e. Allocate the remainder found from the subtraction in "c" between price change and efficiency on the basis of the amounts found in steps "b" and "d". This requires the same method employed in "6d".

These calculations result in a final measure of the effect of price change upon expenses not subject to labor's direct control.

- 8. Add the gains or losses found in steps 6 and 7 to obtain a final measure of the effect of price changes upon cost during the period for repetitive functions.
- 9. Separate the amount of loss or gain (shown jointly in "6d" and "7e") to show the effect of labor efficiency and subcapacity operation upon cost during the period for repetitive functions. This usually is done by:
 - a. Determining the proportion of full capacity operation actually experienced for the period.
 - b. Determining the rate of labor efficiency.
 - c. Separating the loss by use of the equations

$$Y = \frac{Z(\frac{1}{2}B)}{A}$$

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$$X = Z - Y \quad (1)$$

B. Non-Repetitive

1. Allocate all costs of distribution by functions.
2. Prepare detailed budgets by functions for each natural expense element, assuming various possible rates of capacity operation.
3. Determine the actual average price per unit for all expense elements.
4. Make preliminary calculations of the losses resulting from price change. This may be accomplished by:
 - a. Multiplying the total sum budgeted for capacity operations by the actual percent of capacity operation.
 - b. Multiplying the standard quantity of goods and services for the actual rate of operations by the actual unit prices.
 - c. Subtracting the sum found in "b" from that found in "a".

(1) Longman, D. R. Distribution Cost Analysis. Harper Bros. New York. 1941. First Edition. Page 93.

A = The determined percentage of inefficiency of the factor most inefficient (either labor or plant utilization).

B = The determined percentage of inefficiency of the factor less inefficient.

X = The amount of the joint loss attributable to the factor of greatest inefficiency.

Y = The amount of the joint loss attributable to the factor of lesser inefficiency.

Z = The total dollar loss attributable to the joint inefficiency of labor and management.

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5. Determine the dollar loss from all sources by subtracting the amount found in "4a" from the actual cost found in (1).
6. Determine the loss resulting from subcapacity operation by subtracting the amount found in "4a" from the budgeted cost for the actual rate of operation (Step 2).
7. Compute the preliminary estimate of the loss resulting from inefficiency by:
 - a. Multiplying the actual quantity of goods and services used by the standard price per unit.
 - b. Subtracting the total found in "4a" from the sum found above.
 - c. Subtracting the loss from subcapacity (Step 6) from the sum found in "7b".
8. Complete the measures of loss or gain from price change and from inefficiency as follows:
 - a. Add the loss from subcapacity operation to the preliminary figures for losses from price change and from inefficiency.
 - b. Subtract this total from the total actual loss found in Step 5.
 - c. Separate the discrepancy as between price change and inefficiency in the fashion indicated in "6d" of the section on repetitive functions.
 - d. Add the sums found in "c" to the preliminary figures for final statements of loss or gain from these factors.

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The foregoing presents the method of determining the loss attributable to the factors of price change, labor inefficiency and subcapacity operations, but Longman would have the analyst go further, determining the profit or loss attributable to the efficiency of operation routines, purchasing power, financial strength (1), and distribution policies (2) before attempting to compute the profit or loss by products, customers and territories. His object in doing this is to eliminate as much as possible any influencing factors which can be controlled by the management and which might have an erroneous effect on commodity, customer, and territorial profit and loss figures. The reader is referred to the text itself for an explanation of the methods of arriving at the results for the remaining controllable factors.

In determining profit and loss by commodities and customers, the functions should be classified according to their manner of cost variation (3):

1. Functions which are engaged in speculatively for the purpose of making sales, and functions that must be performed as a direct result of sales made and in preparation for further sales (e.g. order filling, wrapping, packing, and buying).
2. Functions that are performed as necessary concomitants of any business (e.g. personnel work, bookkeeping, cleaning, heating).

(1) Longman, D. R. Distribution Cost Analysis. Harper Bros. New York. 1941. First Edition. Page 110.

(2) Ibid. Page 121.

(3) Ibid. Page 131.

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3. Supervisory functions.
4. Management functions (e.g. determination of sales and financial policies).

Upon the basis of these groups of functions, the following steps should then be taken (1):

1. Study the detailed work and the expenses for supplies, material, and services for each function to determine the source of variation, whether it be the product, the customer, or another function.
2. Determine the basis or bases for variation of each fundamental cost element (e.g. size of product, number of credit orders, freight or postal zone, etc.).
3. Compute the expense involved over a given period of time for such groups of functional elements as vary on different bases.
4. Obtain the quantitative measurements necessary for each basis (e.g. the number of units of each product sold, or number of orders placed by each customer, time required in preparing advertising per article, volume of sales by customers, and the like.
5. Allocate supervisory costs to functions in Groups 1 and 2.
6. Allocate the costs of functions in Group 2 to those functions

(1) Longman, D. R. Distribution Cost Analysis. Harper Bros. New York. 1941. First Edition. Page 140.

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in Groups 1 and 4 for which they were performed.

7. Allocate Group 4 costs to the remaining functions in Group 1, using as a basis the proportionate cost of each to the total cost of all.
8. Allocate Group 1 functional costs to commodities and customers, thus completing the allocation process.

To obtain the net profit by commodities and customers, the following additional steps must be taken (1):

1. Determine the percentage of customer costs (allocated to the given customer or customer type) to sales made to that customer or customer type.
2. Apply the percentage thus found to total sales of the product to find total customer costs applicable if all sales of the product were to that customer.
3. Deduct the total product costs as allocated to the article and the total customer costs (as found in Step 2) from gross profit. The resulting net operating profit should be expressed as a percent of net sales.
4. Multiply the operating percentage by actual sales of the article to the particular buyer or buyer type. This will yield the net profit on actual sales to that buyer.

The greater part of this chapter has been devoted to an explanation of methods of analysis of distribution costs. Such analyses must necessarily

(1) Longman, D. R. Distribution Cost Analysis. Harper Bros. New York. 1941. First Edition. Page 143.

Standard Costs

deal with costs of past periods, but they are important in that they form the basis for the establishment of standard costs for the various expenses and permit control of actual future expenses through these standards.

When comparisons of standards and actual experiences are made, variations should be reported to the management. Not all standards are compared at once. Some expenses have to be followed closely, while others can be checked only once a month or every six months. Therefore, the frequency of making reports varies according to various expenses.

In such reports only variations from the standards need be shown. They should present the standard, the actual, the variation, the explanation, and the result of the variation in simple understandable terms.

It is to be noted that standards are not limited to dollar and cents values. They may be stated in terms of the quantity of work to be done, number of orders filled, etc. In the field of business management, standards are of utmost importance (1).

The standards portray what the expenses should be if all conditions existed as planned. By comparisons of actual expenses with standards, management can discover the existence of discrepancies and investigate their origin.

They also serve as a basis for budgeting; thus, they are not only used for measuring past performance, but they enable management to forecast future income and expenses.

(1) Donald, W. J. Editor-in-Chief. Handbook of Business Administration. McGraw-Hill Co., Inc. New York. 1931. Page 882.

Standard Costs

C. Graham Wholesale Grocers, Inc.

The office staff is too small and inexperienced to allow standard cost to be used as an integral part of the books of account. However, the system outlined thus far will furnish sufficient information for setting standards separately and thus allow periodic comparisons with actual experiences by the accountant and the executives.

The standards records should be designed to correspond as closely as possible with the general ledger and supporting records, thus permitting determination of variances and easy transfer of figures to the comparison sheets.

Standards should be established and interpreted by the public accountant for the concern.

The following are the standards that should be of value in the concern:

1. Sales Expenses:

- a. Percentage of direct expense of each salesman.
- b. Percentage of direct expense to sales and gross profit of each salesman.
- c. Percentage of advertising to sales.
- d. Percentage of sales returns to sales.
- e. Percentage of gross profit to sales.
- f. Percentage of total selling expense to sales.
- g. Average size of all orders received.
- h. When profit and loss by items, customers, and salesmen has been determined;

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1. Amount to be sold to each customer.
 2. Amount to be sold by each salesman.
 3. Percentage of gross profit to be returned by each salesman.
 4. Amount of gross profit to be returned by each salesman.
2. Purchasing and Warehouse Expense:
- a. Percentage of carrying cost to sales.
 - b. Percentage of receiving and handling wages to cost of goods sold.
 - c. Wage cost per order filled (for profitability of customers).
3. Truck and Delivery Expense:
- a. Gallons of gasoline used per 100 miles for each truck.
 - b. Gallons of oil used per 100 miles for each truck. Cost of tires and repairs used per 100 miles for each truck.
4. Credit and Collection Expense:
- a. Average number of days accounts are outstanding.
 - b. Percentage of bad debts to sales.
5. Standards for General Management
- a. Percentages of liabilities and net worth to total assets.
 - b. Ratio of current assets to current liabilities.
 - c. Percentage of each functional group of expenses to net sales.
 - d. Percentage of payroll to net sales.
 - e. Turnover of inventories.
 - f. Turnover of total assets.
 - g. Percentage of net profit to investment.

Budgets and Controls

VI

Budgets and Controls

A. General

The budget is the program and constitutes the chief tool of coordination. Advance planning or budgeting has two major advantages (1):

1. More study and consideration are given to the problems and policies of the business.
2. The effort of all divisions is coordinated since each has a definite known part in the program.

A budget committee should be established and given the responsibility of enforcing the budget.

Under a properly operating budget plan, the activities of purchasing, finance and administration are coordinated with sales operations in a way that is productive of a maximum percentage of net profit (2).

B. Sales Budget

Inasmuch as net profit depends upon the sale of merchandise, the sales program should be the first part of the budget to be prepared. Prior to preparation of the details of this program, the budget committee must set the factors of volume and direct cost to secure volume at the

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- (1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 130.
 - (2) Beckman, T. N. Wholesaling. The Ronald Press. New York. 1936. First Edition. Page 174.

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point of greatest ultimate profit, consideration being given to indirect costs (1).

When this has been done, the sales budget may be developed and recorded in detail, showing a breakdown by individual salesmen who are to be responsible for carrying out the program.

Various things must be considered in determining sales quotas; the following is presented as an illustration (2):

"The usual method (of planning estimated sales for a six-months' budget) requires that the sales quota be based on the average sales of each department for the preceding three periods, modified by the increase or decrease from the general growth or decline of that department, general business conditions, nature of the sales effort expected, and the minimum volume of business each department has to secure in order to show a profit."

C. Purchase Budget

The purchase budget is more important because of its relation to inventory control than because of its relation to sales, yet it is dependent upon both sales expectancy and the amount of inventory it is desired to carry (3).

- (1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 132.
- (2) Beckman, T. N. Wholesaling. The Ronald Press. New York. 1936. First Edition. Page 193.
- (3) Ibid. Page 135.

"One method of determining purchase budget requirements:

Estimated inventory January 1	6,000
Estimated Sales for January as per sales budget	8,000
Sales reduced to a cost basis	6,800
Monthly rate of turnover desired	1 1/4 times

Continued Page 104

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The sales budget provides the figures for sales expectancy; the amount of inventory depends upon financial considerations, the most profitable rate of merchandise turnover for the various departments, and the trend of prices.

D. Expense Budget

The expense budget represents the estimated distribution costs for the ensuing period. In order to make sales, it is necessary to spend money. This budget is the means of determining how much it is necessary to spend, what type of expenditures should be made, and when and where to make them in order to produce certain sales results; to see that expenditures are made as planned, and, finally, to see that such expenditures secure the results intended (1).

If a concern is to have a budget at all, it should be a good one, for a budget is at the most an estimate and can be effective only if carefully drawn up.

First of all, it should be based on a thorough study of past, present, and expected future conditions, such study being made in ample

(3) Page 103 continued

"Average inventory to be carried (6,800 divided by 1 1/4)	5,440
Purchases to be made would then be calculated as follows:	
Sales Requirements	6,800
Inventory Requirements	5,440
Total	12,240
Less: Inventory at the beginning of the month	6,000
Purchases to be made	6,240"

(1) Heckert, J. B. Analysis & Control of Distribution Costs, for Sales Executives and Accountants. The Ronald Press Co. N.Y. 1940. P. 275.

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time to avoid hasty judgments. Study that takes place after the money is spent is futile unless it is used to prevent extravagance in the future.

By keeping records and charts of sales volumes and expenses over several years, it is possible to forecast probable monthly sales volume and corresponding expenses in advance. This enables the establishment of a budget from which deviations of actual cost can be readily seen and investigated. As the records kept are further broken down, many other factors can be forecast, such as the number of orders that will be received, the number of deliveries to be made, the effects that significant changes in sales volume will have on expenses, etc. (1).

The program will be much more effective if the services of the entire organization are enlisted, for the men will try harder to carry out plans which they have helped to make (2).

As an aid in helping the organization to carry out their part of planning the budget, the basic policies of the concern and the definite objectives toward which the men must work should be clearly stated and given expression in the budget (3).

It is important that the distribution cost budget be coordinated with the sales budget, since the costs exist for the sole purpose of

- (1) U. S. Department of Commerce, Bureau of Foreign & Domestic Commerce. Effective Grocery Wholesaling. U.S. Government Printing Office. Washington. 1941. Page 175.
- (2) Heckert, J. B. Analysis & Control of Distribution Costs, for Sales Executives and Accountants. The Ronald Press Co. New York. 1940. Page 277.
- (3) Ibid. Page 277.

Budgets and Controls

making sales (1). The law of diminishing returns does not permit sales to increase above or decrease below certain points where the additional costs expended or saved are not compensated for by the additional increase or decrease in revenues (2). Coordination will result in budgeting the greatest possible amount of sales at the least possible cost, thus rendering the greatest net profit.

All estimated figures should be based on forecasts of expected actual costs rather than on standard costs. This may seem contrary to the statement that standard costs form the basis for budgets (3), but it is not. Comparisons of actual cost with standards reveal discrepancies, many of which can be corrected in the coming period, but others of which cannot. Where management can eliminate the cause of the discrepancies, it should take steps to do so; and, in this regard, budgeted actual and standard expenses should be the same. However, where discrepancies cannot be eliminated and actual future expenses are expected to be above standard, actual figures should be budgeted (4).

There are four steps in the method of budgeting distribution costs (5):

(1) See Page 104

(2) Paton, W. A. Accountant's Handbook. The Ronald Press Co. New York. 1945. Third Edition. Page 1160.

(3) See Page 99

(4) Heckert, J. B. Analysis & Control of Distribution Costs, for Sales Executives and Accountants. The Ronald Press Co. New York. 1940. Page 286:

" the budget does not simply represent the sum total of individual standards of performance. Both individual standards and the coordinated program are essential tools to efficient control and direction of operations."

(5) Ibid (2) above. Pages 1161-1162.

Budgets and Controls

1. Determine the major classifications and subclassifications through which the program is to be expressed (e.g. the cost budget may be set up; first, by products and the costs of each further classified by territories).
2. Classify the costs as to direct and indirect.
 - a. Executives can be held accountable for only those costs over which they have direct control.
3. Estimate the individual cost items in accordance with the classifications developed in previous steps.
4. Break the estimates down by months and quarters in order to gain closer control and predetermine financial requirements.

E. Other Budgets

By the establishment of a budget covering operations, information is provided for a financial budget, a fixed capital budget, an estimated profit and loss statement, and a balance sheet (1):

1. A sound estimate of sales permits estimates of the actual cash that will be received.
2. Knowledge of expected purchase commitments and expenses that will be incurred enables a budget of cash disbursements to be prepared.
3. With knowledge of the estimated financial status of the concern during the coming period, additions or replacements

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Pages 136-140.

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to fixed capital items can be planned.

4. The sales, purchases and expense budget enables preparation of an estimated operating statement for the period.
5. The estimated net profit, cash balance and fixed capital changes provide the basis for an estimated balance sheet as of the last day of the period.

Where the services of the entire organization are enlisted in preparing the budget, the responsibility for departmental budgets should be assigned to the various department heads. These men should be held accountable for variations from their budgets and should not run ahead of them without advance explanation and consent of the budget committee (1).

Reports showing actual performance as compared with budget figures should be made regularly both to division heads and to the budget committees. Where possible, the regular period should be monthly, thus permitting detection and remedy of discrepancies before too great a time has elapsed.

As indicated previously, the budget requires long and careful study in its preparation. It should not be drawn up overnight by the chief executive but should represent the combined estimates of men who know their job. It should be as accurate as possible but flexible to permit changes when they appear necessary during the budget period. The

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 136.

Budgets and Controls

reward for such study and effort is a closer control and a greater net profit.

F. Controls

1. Control of Selling Expenses

In a wholesale concern, which is primarily a selling organization, the largest and most important cost of doing business is the selling expense. This may be broken down into the following elements:

1. Salesmen's salaries
2. Direct sales expense
3. Advertising
4. Catalogue expense
5. Supervision and clerical expense

The problem in each case is one of setting the proper standards and budget estimates and seeing that they are adhered to.

In the case of salesmen's salaries, proper consideration must be given to the best method of compensation for the particular concern. As mentioned previously, there are various methods in use (1):

1. Straight salary
2. Straight commission
3. Combination plans
 - a. Salary and commission

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Pages 160-161.

Budgets and Controls

- b. Profit-sharing plan
- c. Point plan
- d. Bonus standard plan

Items to be considered in establishing the merit of the compensation plan selected are presented by Heckert and Stone in the form of questions (1):

- "1. Will it operate in such a manner as to secure and retain the type of salesmen desired by the firm?
2. Is it easy to administer and can it be readily understood by the salesmen?
3. Does it work fairly and impartially?
4. Does it tie in with the sales policies of the firm in such manner that salesmen will do what is desired of them?
5. Does it provide an incentive for the salesman to do his best work?
6. Are the amounts due to salesmen paid promptly?

The direct selling expense consists of salesmen's expenses on the road. Briefly, the two main elements and points to regard considering them are (2):

1. Transportation
 - a. Bus or train - cost determined by routing
 - b. Automobile

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 159.
 (2) Ibid. Page 164.

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- 1) Mileage allowance - if salesman uses his own car.
- 2) Company pays the upkeep and expense on company-owned cars.
 - a) Any extra mileage should be explained.
 - b) Salesmen should obtain receipts for all expenses incurred.
2. Meals, lodging and entertainment
 - a. Company may pay actual expenses reported by salesmen.
 - b. Or the company may provide a daily or weekly allowance.
 - c. The first method is preferable and should be controlled by carefully determined standards.

If profitability of customers or lines is being determined, salesmen should be required to analyze their expenses accordingly. The extent to which this is possible depends upon the nature of the products sold and the number of customers called upon.

The three remaining elements should be controlled by establishing budget estimates on the basis of past experience or performance standards (1).

1. Advertising should be budgeted a few months in advance on the basis of past experience and future advertising programs.
2. Catalogue expense should be budgeted on the basis of the amount of space allotted to each class of goods.
3. Supervision and clerical expense should be based upon

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 165.

Budgets and Controls

standards of performance and controlled directly by the sales executives.

The use of standards and budgets is not restricted to the control of selling expenses, for operation and general expense can also be controlled in this manner (1).

2. Control of Accounts Receivable

That there is a definite expense involved in the carrying of accounts receivable on a company's books was proven by J. Brooks Heckert in a study made for one of his clients. Part of this study, illustrating the manner in which various elements of the total expense were determined, is presented in his Wholesale Accounting and Control (2).

It would not be feasible for all concerns to undertake such a detailed study of the cost of carrying its accounts receivable as is presented by Mr. Heckert, because the expense would be too great. It is sufficient to realize that there is a cost to selling goods on account and only by prompt payment on the part of customers and elimination of poor debtors by credit investigation can such expense be kept at a minimum.

Management should be supplied constantly with information on the credit standing of present and new customers. In the case of new customers, this may consist of reports from other wholesale grocery

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Pages 175-182.
(2) Ibid. Pages 175-182.

Budgets and Controls

establishments (1) or other creditors of the party involved.

Credit standing of present customers can be determined by information from their other creditors or by periodic aging of accounts. This latter function is a necessary and important step in the control of accounts receivable.

Salesmen may be held responsible for the number of bad debts experienced among the customers in their territories or for the prompt payment of bills by their customers. This is distasteful to the salesmen, but it will make them credit conscious and will probably save money for the concern.

3. Control of Inventory

The subject of control of inventory is a lengthy one and, therefore, warrants separate consideration in a chapter of its own (2).

G. Graham Wholesale Grocers, Inc.

1. Budget

A budget should be drawn up by the vice-president with the assistance of the accountant and the buyer. This budget should provide generally for operations a year in advance and specifically for operations

(1) In the author's own city (Worcester, Mass.), there is a credit organization comprised of wholesale grocers which meets every three weeks or so for the purpose of discussing the credit standing of the retailers and institutions served by these men.

(2) See Chapter VII.

Budgets and Controls

six months in advance of the budget date. The size of the organization enables these men to estimate all phases of operations without seeking preliminary information from anyone else in the concern. However, when further information can be gained from it, salesmen ought to be questioned on the estimated sales within their territories.

The budget should consist of a complete operating budget and, as far as is possible, a financial budget. There is no need of a fixed capital budget since the concern rents the property and the amount of its fixed assets is not great. Estimated financial statements may be drawn up by the public accountant if the management so desires.

2. Control of Selling Expenses

Salesmen's compensation should be composed of a base weekly salary plus a commission on the dollar gross margin of their sales (1). This fulfills all the requirements of a fair compensation plan and results in greater profits for the concern, since it makes the salesman gross margin conscious. In order to make greater commissions, the salesmen will concentrate on the sale of products yielding the highest gross margin. Care must be maintained, however, to be sure that salesmen do not neglect low margin goods altogether.

The costing of invoices provided for in Chapter III will serve as the basis for determination of such commissions. Control can be kept through direct supervision by the sales manager (vice-president).

(1) U. S. Dept. of Commerce, Bureau of Foreign & Domestic Commerce. Effective Grocery Wholesaling. U. S. Government Printing Office. Washington. 1941. Page 73.

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Salesmen use their own cars and should be paid on a mileage basis. This eases the work in the office and enables closer control of the transportation element of direct selling expense.

All salesmen return to their own homes each evening, their territories being within easy driving distance; consequently, no allowance need be made for meals and lodging.

Salesmen should be reimbursed in full for entertainment expenses incurred by them with explanations required where excessive expenses are evident.

Advertising and cataloguing should be budgeted as was mentioned previously. No additional control is necessary.

Supervision and clerical expense needs no special control, since all supervision is done by officers who have an annual salary, and the number of clerks is small.

3. Control of Accounts Receivable

The concern should become a member of the local wholesale grocers' credit association, thus opening a source of information on customer credit standings heretofore closed to it. Other sources of credit information should also be utilized.

Accounts receivable should be aged at least monthly. Reports of delinquent accounts should be brought to the attention of the salesmen, since they are responsible for making collections as well as for obtaining new customers.

Definite policies regarding sales to customers who are a certain

Budgets and Controls

number of days behind in payment should be established. Information regarding delinquency should be passed on to the salesman as soon as it is known.

Statements should be sent out weekly, enabling as rapid turnover of accounts receivable as is possible. This also prevents a bad account from becoming too large before the management discovers that it is not sound.

Reports of bad debts should also be made known to salesmen in order to discourage the acquisition of orders without regard to the credit status of the customer.

4. Control of Inventory

A complete inventory system is outlined in the last part of Chapter VII.

Control of Inventory

VII

Control of Inventory

A. Need for Control

"The wholesaler assembles and warehouses in a convenient place both a quantity and a variety of merchandise. This requires investment, risk, judgment as to consumer demand, and knowledge of economic forces" (1).

Inventory control deals directly with the investment mentioned above and is the means of keeping tabs on that investment. Were any businessman to have a sum of cash in the amount of \$150,000 or larger on hand in his place of business, he would take every precaution to safeguard it and to provide a suitable means of finding its exact amount at all times. Even cash in the bank, which is guarded by every possible method, is watched carefully no matter what the sum. The cash balance is carried on the checkbook stub and changed with each deposit made or check drawn. A reconciliation is then made at the end of each month to find and correct errors.

Merchandise in stock should be treated in the same way. As such, it represents a great sum of money, for the wholesaler had to pay cash for it and will receive cash when he sells it. Stock losses can prove a great expense to the concern when they are expressed in terms of their monetary value.

Not only will stock losses result in an expense to the concern, but stock shortages (out-of-stocks), which occur all too frequently when

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 9.

Control of Inventory

a close control of inventories is not kept, will result in loss of customers due to dissatisfaction with deliveries. A retailer orders merchandise because he needs it and failure to receive it on time will turn him to other wholesalers.

This control is also important if a wholesaler is operating on the principle of low gross margin--high rate of turnover (1) and is a factor that will aid greatly in buying.

B. Methods of Control

The methods of inventory control used by wholesale grocers may be listed as follows (2):

1. Observation methods
2. Periodical stock-count methods
3. Visible-index perpetual-inventory-control methods
4. Unit-card, perpetual inventory method

The first method consists merely of going through the warehouse and taking an actual or estimated count of stocks on hand. No figures are kept and the count only indicates what items are to be purchased. Although this is the least expensive of the methods, it is also the least accurate.

(1) U. S. Dept. of Commerce, Bureau of Foreign & Domestic Commerce. Effective Grocery Wholesaling. U. S. Government Printing Office. Washington. 1941. Pages 143, 156, 158:

A system of inventory control is essential if the wholesaler is to weed out the slow-moving items prevent "out of stocks," establish optimum purchase quantities, and achieve a high rate of turnover.

(2) Ibid. Pages 144-146;

Inventory Control

The periodical stock-count methods render a larger degree of current control and a permanent record or history of the wholesaler's inventory experience. This method involves the actual counting of the stocks at scheduled times. The slower moving items are scheduled for counting fewer times than the fast-moving items. Records are kept of each count and a tickler file is employed for indicating when a stock count should be taken.

This method is useful only where the warehouse is efficiently arranged, the warehousemen are sufficiently supervised when counting and the office staff is accurate in recording all purchases.

The perpetual inventory methods are the most accurate, but the most expensive form of inventory control. However, the savings resulting from their use usually more than compensate for their expense.

The first, the visible-index method, is comprised of cards or sheets kept in some kind of file or binder and operates as follows:

Daily sales are posted from customers' invoices in units. These are subtracted from the total of the beginning inventory (units) plus the purchases (units), leaving the balance on hand in units. By checking these balances on hand periodically with a physical inventory, discrepancies can be investigated and corrected.

Special columns are provided on each card for purchases, sales and balances on hand.

A sales recapitulation card and a purchase card kept for each item show monthly sales for a number of years, and a record of purchases

Inventory Control

and the prices paid. From the latter it is possible to obtain:

1. The cost of goods sold
2. The value and quantity of the goods on hand
3. The lapse of time between the purchase and receipt of the merchandise.

A more detailed description of this method is shown in the illustration for the Graham Wholesale Grocers, Inc. (1).

It is to be noted that the three methods of inventory control considered thus far provide for control in terms of units only, dollar value being determined by multiplying the balance on hand for each item by the price under one of the following (2):

1. The last purchase price
2. The first-in, first-out principle
3. Simple average price
4. Weighted average price
5. Moving average price
6. Current market price

(Of these six, the first is usually satisfactory.)

Under the next method to be considered, the inventory is kept in dollar values as well as in units by the use of punched cards and mechanical equipment.

With the use of unit cards, the inventory consists of punched

(1) See Page 124

(2) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 195.

Inventory Control

cards kept in a tab file. There is a card for each individual item of inventory, such as each case, each bag or each box of the various kinds of stock carried. These cards are punched to show the name of the vendor, the type of goods, the cost and selling prices and any other information desired (1).

They are then numbered consecutively from one to the maximum number of items on hand in the particular type of product. Each type has a particular stock number. Thus each card carries two numbers--the stock type number and the individual unit number.

When a quantity of goods is sold, such as ten cases of peaches, the cards for that quantity are pulled from the file. The remaining cards show how much of that type of stock is left on hand.

For example, to continue with peaches, we will assume that a concern has 300 cases of Glorietta peaches in stock. There would then be 300 cards in the tab file, card number 300 showing first. The order for ten cases is received and filled. The inventory clerk pulls ten cards from the file, leaving card #290 showing first. Thus, at a glance, the inventory clerk or buyer can tell that there are 290 cases in stock, since it is evident that there are 290 cards in the file.

Such a system requires automatic machines, large office space and well-trained personnel. Although the expense is great, it can be

(1) The explanation of the operations of this system of inventory control was outlined to the author by Mr. James McGourty, District Salesman for International Business Machines Company, Worcester, Massachusetts Branch.

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offset by a reduction in personnel and the use of the cards and machines for analyzing sales and gross margins of profit by commodities, salesmen, territories, customers, etc. As a result, it is difficult to ascertain just how much of the expense of this system is applicable to inventory control.

The reader will note that reference was made to units of merchandise. These units may be in terms of cases, bags, 100 lb. weights, etc. However, orders are frequently received for less than unit amounts, necessitating broken package handling of goods. The extra handling of smaller units results in an added cost as well as added losses due to theft, damaged packages, etc.

Management should try to reduce broken package ordering as much as possible. This may be done in the following ways:

1. Set higher prices for broken package lots.
2. Reduce the commission to salesmen on broken packages.
3. Salesmen may be told not to visit customers who frequently purchase in broken lots.
4. Orders for broken lots may be refused.
5. Induce manufacturers to reduce the size of the cartons.

No matter to what lengths the management goes in its efforts to reduce broken package orders, it cannot eliminate them. The company must always do some broken package selling if it intends to maintain the goodwill of its customers. The following rules will help to control broken package lots (1):

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 200.

Inventory Control

1. A broken package room should be maintained if the amount of such business warrants it.
2. Transfers to this room from regular stock should be noted on the stock record. No effort should be made to control broken package lots in detail, for it is too difficult a task.
3. A physical inventory should be taken periodically. This should be checked against the record balance on hand found by adding the transfers to the initial inventory and subtracting the amount used to fill broken-lot orders.
4. A responsible employee should be placed in charge of the broken package room. He should report directly to the superintendent of the warehouse.
5. The cost of this service should be determined by the accountant and placed before the management to serve as a basis for establishing the policy or method of continuing such service.

In posting to inventory records, the inventory clerk should be careful to note transfers of stock to the broken-package room. If such a room is not maintained, it will be impossible to keep an accurate perpetual inventory, since the records are kept in terms of whole units.

The question of inventory control is of paramount importance to the modern wholesale grocer. Some of the above methods should be used, and the wholesaler should select the method that will give him the best

Inventory Control

information and control that he desires. In making his final decision, the initial cost should not be the deciding factor, but such things as the savings in wages, stock shortages and losses, loss of customer goodwill, higher rate of turnover, and possibility of its use for other purposes should be considered.

C. Graham Wholesale Grocers, Inc.

This concern carries an inventory of some 2,800 different items, but its sales are too small to warrant the use of a unit card system of inventory. Yet some method of perpetual inventory should be kept, for the reasons stated earlier concerning this type of inventory in general. The expense of keeping it will be compensated for by the reduction in out of stocks and losses of stock which have been high up to this time. The following system, explained in detail, is recommended:

The Remington-Rand Kardex File is excellently suited to the needs of a small concern for keeping prices and a perpetual inventory. The flat file drawers contain a great deal of information, yet do not require much space. The names of the various products are always visible, as are the prices, and the inventory clerk can post easily and rapidly. By use of colored tabs, stock quotas, ordering points, etc., can be seen at a glance without lifting the card in the file.

The system herein outlined is designed for a concern having approximately 3,000 different types of products in its warehouse. However, the same principles can be applied to a greater or lesser line where necessary.

Inventory Control

Two sixteen-drawer Kardex cabinets, which can be placed on an ordinary table, will serve the purpose. Each drawer has space for 100 different items. The fact that two cabinets are used provides space for 3,200 different types of merchandise.

Each drawer contains 100 base cards, each with a celluloid strip along the bottom. By means of slots in each base card, temporary cards, ruled as desired, can be inserted in the file. Inventory data can readily be recorded in detail upon these temporary cards and new cards inserted when necessary. Recap cards, inserted on the back of the next higher base card, provide summarization of the detail periodically, enabling the inventory clerk to discard the detail cards when they are full (1).

The name of the item, the data for which appears on each card, is inserted at the bottom of the base card, beneath the celluloid strip. The left half of the strip contains the name and price inserts, while the right half is used to denote the quantity of goods on hand by use of a movable colored tab.

The quantity insert denotes the number of days' or weeks' supply on hand. The colored tab is set at the proper point each day as the inventory clerk posts, enabling the buyer or any other executive to tell at a glance the status of the inventory of each item without reference to actual quantity figures. This quantity may be expressed in words as well as in terms of days' and weeks' supply on hand by use of a different insert.

(1) As outlined by A. D. Stubblebine, Manager of Business Division, Remington-Rand, Inc., Worcester, Massachusetts Branch.

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Once the cabinets are installed, the cards inserted, and all arrangements made for operation of the system, the inventory clerk can begin posting receipts and disbursements of merchandise.

Posting of merchandise shipped can be facilitated by the use of tally cards where an item appears on two or more orders. Instead of recording the quantities shipped in the file directly from the order, these quantities are listed individually on tally cards for each item. When all shipments have been recorded on the tally cards, these cards can be totalled and that figure posted to the file card. This procedure eliminates the work of pulling and pushing file trays, lifting cards, and tying up use of the files for long periods. Thus, the pricing clerk, buyer, etc., can have access to the files while the inventory clerk is recording quantities shipped. As tally totals are posted, the balance on hand figures are changed accordingly, thus keeping the inventory figure constantly up-to-date.

Orders received are posted daily directly to the inventory card since there is seldom, if ever, more than one order a day received in any one item of merchandise. Just as the balance on hand figure is changed for shipments made, so it is changed for orders received.

The temporary card on the face of the base card records the daily changes in inventory. This card, just as all cards used, is ruled on both sides so that it can be used to full advantage.

The total quantity shipped figure at the end of each month is transferred to a summary card on the back of the next higher file card.

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This monthly summary serves as a basis for reference when management is trying to determine peak periods, ratio of stock turnover, etc. The summary card also provides space for the names of four vendors which sell the particular item, thus enabling the buyer to place an order when stocks become depleted.

The summary card only takes one half the space provided on the back of the next higher base card. The other half carries an order record card which provides columns headed as follows:

1. Date ordered
2. Order number
3. Quantity ordered
4. Date received
5. Quantity received
6. Balance due
7. Number of days' delivery

All entries in these cards are made in terms of units, for the inventory is not kept as a part of the books of account with a control account in the general ledger. However, if the monetary value of the inventory is desired at any time, the inventory clerk or pricing clerk should multiply the balance on hand figure for each item by the last cost price. The total of the values for each item will be the value of the entire inventory.

An illustration of the records used in this method is shown in Figure 9.

The monthly inventory serves as a basis for determining the amount of stock to be ordered. The inventory is determined by adding the stock on hand to the stock in transit and subtracting the stock on order. The inventory is then compared with the inventory control level to determine if an order should be placed.

The inventory card only shows the stock on hand. The stock on order is shown on the order card. The stock in transit is shown on the invoice. The inventory control level is shown on the inventory control card.

1. Date ordered

2. Order number

3. Quantity ordered

4. Date received

5. Quantity received

6. Balance on

7. Number of days delivery

All orders to these cards are made in order of date.

The inventory is not kept as a part of the book of account. It is a separate record in the general ledger. However, it is necessary to keep a record of the inventory in the book of account. The inventory is divided into two parts, the inventory on hand and the inventory on order. The inventory on hand is the stock on hand. The inventory on order is the stock on order. The total of the inventory on hand and the inventory on order is the total inventory. The total inventory is compared with the inventory control level to determine if an order should be placed.

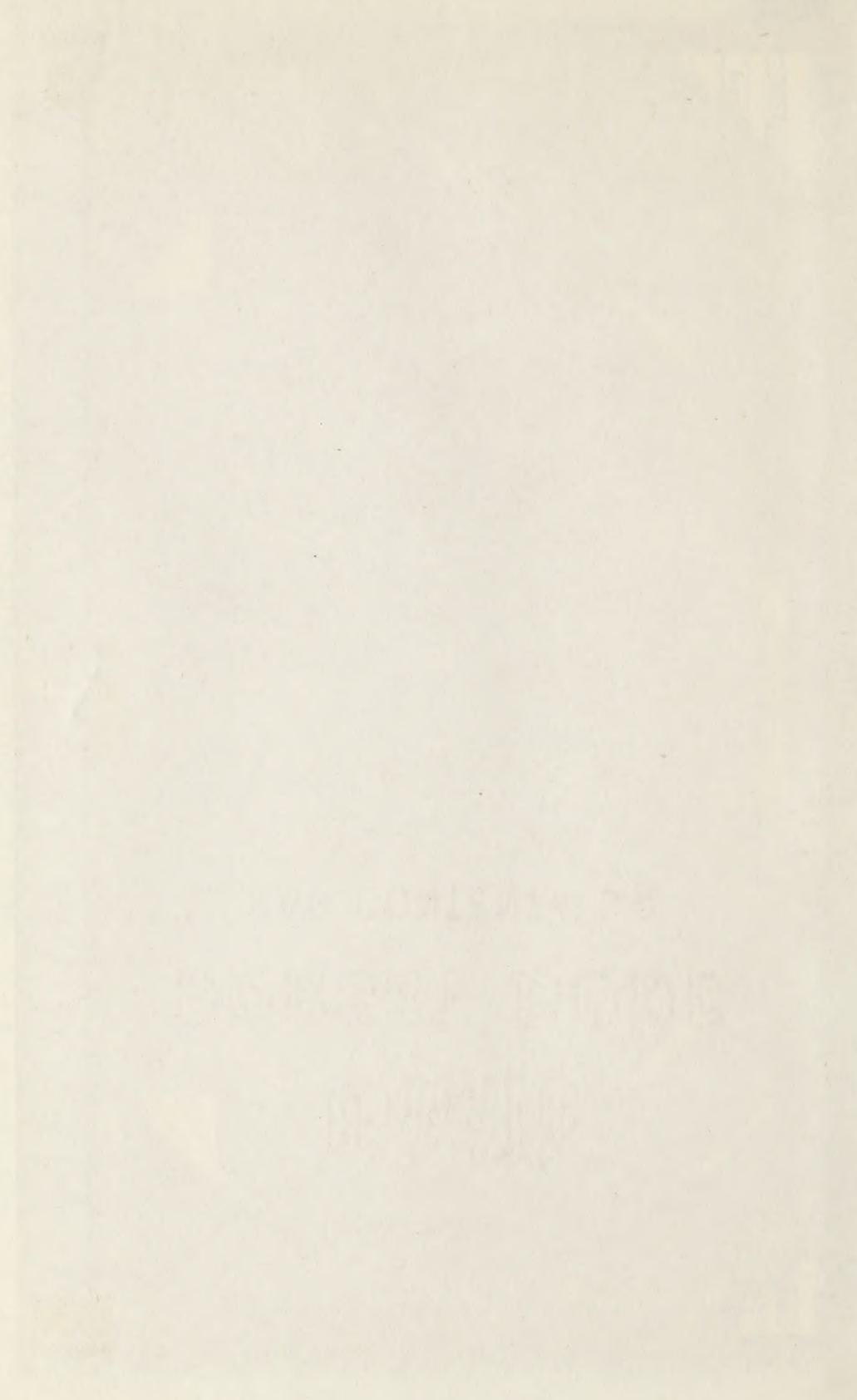


Figure 9
Remington-Rand Kardex System of
Perpetual Inventory and Price Listing

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Figure 9
Remington-Rand Kardex System of
Perpetual Inventory and Price Listing

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Reports

VIII

ReportsA. General

The data gathered in the numerous records and journals mentioned in the preceding chapters would serve no purpose, other than an historical one, if it were not summarized and presented to management at a time and in a form enabling control of selling cost, inventories, and accounts receivable. Consequently, the accountant is responsible not only for keeping accurate records, but also for making reports to management based on the information therein. These reports, together with the accountant's comments and suggestions, carry a great amount of weight around the conference table.

The reports needed by management vary with each concern, and it is up to the accountant to devise those required for his particular establishment (1). However, there are certain rules that he should follow in this regard (2).

1. The report should contain only information, language, and terms that are readily understood by the reader.
2. The report should be confined to one subject or purpose as much as possible.
3. No individual report should contain an excessive number

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935.

Page 89: "The various types of reports must be left to the resourcefulness and ingenuity of the accountant."

(2) Ibid. Page 141.

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of figures.

4. The information should be suited to the man who will use it.
5. Generally speaking, only exceptional situations or variations from standards or budgets need be reported if the report is designed primarily for control purposes.
6. No reports should be made simply for routine.

The reports and statements that should be furnished are those

which are necessary for the following purposes:

1. Policy determination
2. Program preparation
3. Establishment of standards of operation
4. Sales control
5. Expense control
6. Investment and financial operations control

The following quotation illustrates the importance of such statements and reports (1):

"Another wholesaler finds that the expense of making the sales and gross-margin analyses that are necessary for his monthly operating statements is repaid by the benefits derived from the timeliness of the information obtained to control expenses. He said:

'Having set up departmental expense accounts we assign responsibility for many of our operating expense items to specific departments. We can estimate accurately the sales, buying, warehousing, coffee roasting, delivery, and other expenses. This

(1) U. S. Dept. of Commerce, Bureau of Foreign & Domestic Commerce. Effective Grocery Wholesaling. U. S. Gov't Printing Office. Washington. 1941. Page 169.

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"classification involves a detailed system of accounts and much time is spent in classifying each item of income and expense. We do it, however, because we find the results useful.

'To help each departmental executive control the income and expense for which he is responsible, we prepare monthly operating statements. These show sales, cost of sales, gross margins, detailed and total expenses for each department and the monthly net profit. They are prepared from our regular accounting records. Actual monthly sales, cost of goods sold, and gross margins are obtained from sales analyses. A few minor annual expenses, such as taxes, are estimated. We finish these operating statements soon after the close of the month and although the total monthly expenses and net profits are partly estimated, we find they check closely with annual figures.'"

The reports are not limited to monthly profit and loss statements.

As was stated in one of the rules presented earlier, "The information should be suited to the man who will use it (1)." Consequently, reports may be classified according to the persons for whom they are designed:

1. Reports for general managers
2. Reports for department managers
3. Reports for salesmen
4. Reports from salesmen
5. Reports for sales managers

The reports to the general managers should be in summary form and should call attention to exceptional situations which need consideration. Suggestive of this type are (2):

- (1) Ref. Rule 4. Page 130
- (2) Heckert, J. B. and Stone, I. J. Wholesale Accounting and Control. McGraw-Hill Co., Inc. New York. 1935. Page 144.

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- a. A report on the trend of sales with net sales expressed in both dollars and physical volume.
- b. A comparison of actual net sales with the budget in both dollars and physical volume. Important variations in certain departments, salesmen, and classes of customer are set forth individually.
- c. A comparison of actual performance with standards, in terms of percentage performance with individual variations shown.
- d. A comparison of sales returns and allowances with standards, together with an analysis of the causes of such returns and allowances.
- e. A report on important variations of gross profit from the budget.
- f. A comparison of sales expense with the budget, setting forth important variations by individual items or classifications of expense.

Most of the information primarily desired by department managers or buyers, such as that pertaining to the demand for individual items, and the movement of items is obtained by direct contact with salesmen and stock clerks. However, the following are suggestive of the formal monthly reports that may be found useful (1):

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting & Control. McGraw-Hill Co., Inc. New York. 1935. Page 151.

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1. A report presenting departmental sales, and gross profit amount and percentage for the month to date.
2. A comparison of sales and gross profit with the budget.
3. A comparison of sales and gross profit with the standard.
4. A statement of returns and allowances analyzed as to causes.

The question of giving reports to salesmen is a much debated one. Some executives feel it tends to make the salesmen think too much of themselves and is a source of information to competitors, while others believe that, as a result of receiving reports, the salesman feels he has a real interest in the concern and is able to view his own progress.

Where given, these reports should concern themselves with (1):

- a. Sales
- b. Sales returns and allowances
- c. Gross profit
- d. Direct expense
- e. Sales by classes of merchandise
- f. Comparisons of these items with standard.

Valuable information can usually be obtained from salesmen.

Thus, regular reports on the following items should be made by these men (1):

1. Sales obtained
2. Expenses incurred
3. Collections made

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting & Control. McGraw-Hill Co., Inc. New York. 1935. Pages 152-153.

Reports

4. Adjustments made
5. Routing in advance

The sales manager must have frequent and prompt reports concerning the relation of total actual performance to the program, as well as the relation of actual performance of his men to standard. He should receive a copy of all the reports presented to the general manager plus others relating to special items, as suggested in the following list (1):

1. Statements each week concerning the actual performance of each salesman in terms of sales, gross profit, amount of gross profit, percentage, direct expenses, excess of gross profit over expense, calls made, new customers, etc.
2. A comparison each month of sales expenses with the budget, variations being shown in detail.
3. A comparison each month of gross profit with the budget, variations being analyzed by salesmen and departments.
4. A comparison of sales returns and allowances with standards and an analysis of the causes, if such returns and allowances are important enough to warrant it.
5. A cumulative comparison of actual net sales with standards or quotas set each month.

These reports are only suggestive of those that might be found useful. The use of all of them in some concerns would result in an

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting & Control. McGraw-Hill Co., Inc. New York. 1935. Pages 149-150.

Reports

overabundance of material, while in others they might be supplemented by additional reports peculiar to the individual concerns. In each case, it is a decision for the accountant and the management to make.

B. Graham Wholesale Grocers, Inc.

The need for regular reports is great in a concern of any size, the only difference being in the number and types of these reports. In a concern such as this, where managerial duties are handled for the most part by two individuals, they are greatly reduced. However, in order to aid in buying, selling, and control in general, the following reports should be presented to the vice-president monthly or as closely to this as is permissible, since such reports will have to be drawn up by the public accountant:

1. A comparison of actual net sales with the budget in both dollars and physical volume.
2. A comparison of sales returns and allowances with standard.
3. A report on important variations of gross profit as compared with the budget.
4. A comparison of sales expenses with the budget, setting forth important variations by classifications of expense.
5. Statements concerning the actual performance of each salesman in terms of sales, gross profit, amount of gross profit percentage, and direct expenses.
6. A cumulative comparison of actual net sales with standards

Reports

or quotas set each month.

Since the functions of general manager and sales manager are both performed by the vice-president, these reports will be of value to him.

The clerk, as buyer, should receive the following reports:

1. A comparison of sales and gross profit with the budget.
2. A comparison of sales and gross profit with the standard.
3. Sales returns and allowances analyzed as to causes if they are numerous.

In order to inform each salesman of his individual performances and to instill an interest in the firm within him, the following reports should be made to salesmen:

1. Sales
2. Sales returns and allowances
3. Gross profit
4. Direct expense
5. Comparisons with standards

Some of these reports can be prepared by the bookkeeper and clerks, while others must await the attention of the public accountant serving the concern. Comparisons should be made of the cost of preparing these reports with the benefits to be derived from them and eliminations made where the cost is excessive.

In addition to the reports mentioned above, quarterly, or if possible, monthly operating statements similar to that shown in Figure 10

Reports

should be drawn up. Semiannually a balance sheet similar to that shown in Figure 11 should be presented. These statements should be supported by comments and suggestions of the public accountant.

STATEMENT OF PROFIT AND LOSS

Statement of Profit and Loss

For the _____ Month Ending _____ 19____

Actual 19____
Dollars \$

Budget
Dollars \$

Gross Sales
Less: Sales Discounts & Allowances
Sales Expenses
Net Sales
Cost of Goods Sold
Beginning Inventory (Beginning)
Merchandise Purchases
Less: Purchase Discounts
Beginning Inventory (Ending)
Cost of Goods Sold
Gross Profit (Net)
Operating Expenses (Net)
Income Before Income Tax
Income Tax Expense (Net)
Net Profit (Net)

Figure 12: Profit and Loss Statement

Reports

Exhibit I

GRAHAM WHOLESALE GROCERS, INC.

Statement of Profit and Loss

For the _____ Months Ending _____, 19__

	Year to Date	Budget
	Dollars %	Dollars %
Gross Sales		
Less: Sales Returns & Allowances		
Sales Discounts		
Net Sales		
Cost of Goods Sold		
Merchandise Inventory (Beginning)		
Merchandise Purchases		
Less: Purchase Discounts		
Merchandise Inventory (Ending)		
Cost of Goods Sold		
Selling Expenses (Sch. 1)		
Delivery Expenses (Sch. 2)		
Warehouse Expenses (Sch. 3)		
Receiving & Handling Expenses (Sch. 4)		

Figure 10. Profit & Loss Statement

Reports

Schedule 1

Selling Expenses

	Year to Date	Budget
	Dollars %	Dollars %
Sale smen's Salaries		
Salesmen's Commissions		
Salesmen's Traveling Expense		
Advertising		
Miscellaneous Selling Expense		
Total (To Exhibit I)		

Figure 10. Schedule 1

Schedule 2

Delivery Expenses

	Year to Date	Budget
	Dollars %	Dollars %
Truck Repairs		
Gas and Oil		
Drivers' Salaries		
Truck Insurance		
Delivery Supplies		
Truck License & Taxes		
Depreciation - Truck		
Miscellaneous Delivery Expense		
Total (To Exhibit II)		

Figure 10. Schedule 2

Reports

Schedule 3

Receiving and Handling Expense

	Year to Date	Budget
	Dollars %	Dollars %
Warehouse Salaries & Wages		
Warehouse Repairs		
Warehouse Rent		
Warehouse Supplies		
Insurance on Inventories		
Miscellaneous Warehouse Expense		
Total (To Exhibit I)		

Figure 10. Schedule 3

Schedule 4

General Management and Office Expense

	Year to Date	Budget
	Dollars %	Dollars %
Officers' Salaries		
Office Salaries		
Office Supplies		
Telephone and Telegraph		
General Repairs		
Office Rent		
Bad Debts		
Miscellaneous General Expense		
Taxes - Property, etc.		
Charity & Donations		
Cash Short and Over		
Heat, Light & Power		
Insurance		
Interest Expense		
Legal and Audit		
Federal Old-Age Benefit Taxes		
Mass. Unemployment Comp. Taxes		
Total (To Exhibit I)		

Figure 10. Schedule 4

Reports

Exhibit II

GRAHAM WHOLESALE GROCERS, INC.

Balance Sheet

_____, 19____

Assets

Current Assets

Petty Cash

Cash in Bank

Accounts Receivable

Less: Reserve for Bad Debts

Merchandise Inventory

Merchandise Advances

Total Current Assets

Fixed Assets

Salesmen's Cars

Delivery Equipment

Office Equipment

Less: Reserve for Depreciation

Salesmen's Cars

Delivery Equipment

Office Equipment

Total Fixed Assets

Deferred Expenses

Prepaid Insurance

Prepaid Advertising

Salesmen's Advances

Total Deferred Charges

Total Assets

Figure 11. Balance Sheet

Reports

GRAHAM WHOLESALE GROCERS, INC.

Balance Sheet

_____, 19__

Liabilities & Capital

Current Liabilities

Notes Payable - Bank

Accounts Payable - Trade

Total Current Liabilities

Accrued Items

Accrued Payroll

Commissions Payable

Accrued Taxes

Other Payables

Total Accrued Items

Total Liabilities

Capital

Capital Stock

Surplus (Beginning)

Add: Net Profit

Total Capital

Total Liabilities & Capital

(Figure 11. Balance Sheet Cont.)

Conclusion

VIII

Conclusion

A. The Accountant in Grocery Wholesaling

The accountant is an important figure in modern grocery wholesaling. He is charged with the responsibility of keeping all records of transactions, which records are necessary for the protection of his company. He is not a mere bookkeeper, for his duties carry him into the fields of insurance, taxes, auditing, business management (1).

Much weight is placed upon the reports that the accountant makes to management and his analysis of them. In fact, one author states that the task of reporting to the various executives such information as is necessary for determining policies, preparation of the program, establishment of standards of performance, and measurement of actual performance constitutes the accountant's chief responsibility and his greatest opportunity (2).

In addition to the functions of protection and control as mentioned in the preceding paragraphs, the accountant, or controller, can aid greatly in the coordination of the activities of the concern through his work in helping to formulate, revise, and report on the budget (3).

Despite the fact that the controller may have great experience and ability as well as a sound accounting system, he should insist upon

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- (1) Heckert, J. B. and Stone, I. J. Wholesale Accounting & Control. McGraw-Hill Co., Inc. New York. 1935. Pages 211-212.
(2) Ibid. Page 213.
(3) Ibid. Page 213.

Conclusion

a regular audit by a reputable public accountant. Such an audit would not only afford protection for himself but would also furnish management with an impartial and experienced judgment which is valuable in detecting and correcting weakness in methods and procedure (1).

B. Limitations of the Thesis

In order to perform his duties properly, the accountant must have adequate records for gathering the information he needs. In order to manage properly, the executives should have some knowledge of the accounting principles involved in its particular line of business. This thesis has attempted to present these principles, together with an illustration of their application, for the reader's consideration.

It does not pretend to be all-inclusive, for there is no one set of principles applicable to all wholesale groceries. Neither does it attempt to treat in detail all the principles that are mentioned, for time and space do not permit it. However, the reader is referred to the various texts in the bibliography for a more detailed study of the application of these principles.

(1) Heckert, J. B. and Stone, I. J. Wholesale Accounting & Control. McGraw-Hill Co., Inc. New York. 1935. Page 214

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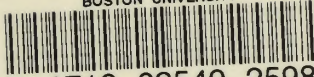
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